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THE UNIVERSITY OF ALBERTA

USING BEHAVIORAL METHODS IN THE MANAGEMENT OF DISTURBED ELDERLY PATIENTS IN AN AUXILIARY HOSPITAL

by

© Donna Lynn Smith

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Using Behavioral Methods in the Management of Disturbed Elderly Patients in an Auxiliary Hospital submitted by Donna Lynn Smith in partial fulfilment of the requirements for the degree of Master of Education

.....
Supervisor

.....

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Date July 9, 1980

DEDICATION

This work is dedicated to the memory

of my grandmother

DAISY REYNOLDS

who had a talent for seeking and

finding goodness in everyone she met

ABSTRACT

The admission criteria for auxiliary hospitals and nursing homes (extended care centers) in Alberta exclude patients with disturbed behavior which may be harmful to themselves, harmful or threatening to others or destructive of property. There is evidence to suggest that despite these criteria, patients with disturbed behavior are housed in auxiliary hospitals and nursing homes in the province. A pilot study employing Flanagan's (1954) critical incident methodology was undertaken in a 100 bed auxiliary hospital and revealed the presence of a significant number of patients with disturbed behavior.

There is little specific discussion in the literature about the assessment or management of disturbed elderly patients. However a review of literature confirmed that behavioral techniques have been used in combination with other treatment modalities in the care of confused or regressed elderly patients in institutions. A treatment program was designed and implemented to improve the care of disturbed elderly patients in the study setting. The program was characterized by increased amounts of purposeful interaction by staff with patients, and the development, for each patient, of an individualized, goal-directed behavioral management plan.

Forty-five patients were treated in the program over a one year period. Patients were selected for the program on the basis of disturbed behaviors which included suicidal threats or attempts, refusal of necessary care and medication, striking out at other patients or staff, or interference with the rights, privacy or possessions of others. Most had been referred from acute care hospitals and had three or more medical problems of physical origin. Most of the patients had some degree of physical or

functional dependency. Over two thirds had regular visits from relatives or friends.

The research problem was to ascertain whether there would be improvement in the behavior of disturbed elderly patients with the introduction of the program. It was hypothesized that improvement would take place. Other questions focused on the outcomes of the treatment program, the appropriateness of the program components with disturbed patients, and the response of staff as they were asked to learn and implement behavioral approaches.

The hypothesis was supported with improvement being seen in over one half of the patients. Although there was no basis for the expectation that the program would result in the discharge of behaviorally disturbed patients from the hospital, 31% (14 patients) were discharged to community settings or nursing homes. The treatment modalities selected were found to be appropriate. The program has continued beyond the one year study period. The fact that a majority of staff assisted in implementing the special care program and continued to maintain it after the study concluded, suggests that significant affective learning or attitude change occurred.

Since the auxiliary hospital in which the study took place was not typical of others in the province, generalizations must be drawn with caution. The results of the study were encouraging, reflecting improvement in patients' behavior and the discharge of a significant number of patients for whom discharge had not been considered a possibility. Replication of the program is not advised unless the necessary professional expertise is available. Recommendations for those wishing to replicate the program have been made. The positive results of this study suggest a number of areas in which further research is needed.

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CHAPTER ONE

BACKGROUND AND IMPORTANCE OF THE PROBLEM

This study was undertaken to design and evaluate a treatment program for behaviorally disturbed elderly patients in a non-psychiatric institutional setting. Limited placement alternatives and a lack of specialized programs combined with rapid growth in the numbers of elderly people with mental health problems are discussed in this chapter as compelling reasons why the study was conducted.

Most elderly people with disturbed behavior are institutionalized (Simon, 1973; Haber, 1978; Gurland, 1979). In Alberta, there are two types of extended care institutions; auxiliary hospitals and nursing homes. Admission criteria for auxiliary hospitals and nursing homes are stated on Form No. 290 (Alberta Department of Hospital and Medical Care). The criteria exclude patients having "characteristics of mental or emotional problems who might be harmful to themselves, harmful or threatening to others, or destructive of property". Although these criteria imply that such patients would not be found in extended care centers, a survey of auxiliary hospitals and nursing homes, conducted by the Alberta Medical Association in 1977, produced overwhelming evidence that most were caring for patients with disturbed behavior and were concerned about the hazards they presented. The problem was especially critical outside of metropolitan areas where psychiatric consultation or treatment services are virtually unavailable.

A range of disturbed behaviors which present problems in the care of elderly persons have been described in the literature. Disturbed behaviors may be antisocial, inappropriate, or bizzare, and include: unresponsiveness, frequent crying, drooling, unkemptness or uncleanliness,

unco-operative reactions, spitting, incontinence, indiscrete masturbation, asocial speech or incoherence, grimacing, mutism, reactions to delusions or hallucinations, abnormal posturing or dressing outlandishly. Some disturbed behaviors such as exposing oneself, indecent advances, shouting, hoarding, stealing, fecal smearing, invading privacy or touching others, are disruptive to others who must share the environment with the behaviorally disturbed patient. There is also a group of disturbed behaviors which can be considered dangerous, either to the person who presents the behavior, or to others in the environment. The dangerous behaviors include destroying objects, striking out at others, wandering away from a building, refusal of necessary care, irresponsible smoking, lighting fires, and suicidal or homicidal attempts. At the present time, patients with disturbed behavior are housed with the mentally sound elderly in auxiliary hospitals and nursing homes in Alberta. These institutions are neither designed or staffed to care for patients with disruptive or dangerous behavior. Such patients are therefore a potential hazard to themselves or others in extended care centers.

In a report commissioned by the Alberta Government, Blair (1969) identified the need for specialized auxiliary hospitals including some designated for psychogeriatric patients. This need has not been met in ensuing years. Until recently, the admission criteria of the only institution in Alberta designated for the long term care of psychogeriatric patients (Rosehaven) specified that such patients should be "manageable and capable of getting about on their own". This effectively excludes patients with physical disabilities, who continue to be placed in auxiliary

hospitals, although they may demonstrate disturbed behavior. In Alberta's auxiliary hospitals, mental disorders account for the third highest utilization of bed-days, preceded only by disorders of the circulatory and nervous systems (Englemann and Stevenson, 1980). This is remarkable when the admission criteria for auxiliary hospitals are considered.

Other components of the health care system in Alberta exclude or fail to respond to the behaviorally disturbed elderly. Community-based care of the mentally impaired elderly is presently excluded from the terms of reference of the provincial home care program in Alberta. Only 3% of the contacts with persons of all ages by Community Mental Health Services were with people 65 years and over (Englemann amd Stevenson, 1980). These facts suggest that Parnell's (1968) statement that "geriatric patients tend to be labelled selectively from their multiple pathology with the diagnosis best calculated to gain admission to a particular hospital" (p.30) is an apt description of the way in which elderly patients with disturbed behavior are assigned to placement in Alberta at the present time.

Several other factors make the care of disturbed elderly patients an especially important and urgent problem. The human and economic impact of the disturbed elderly on the American health care system has been widely documented (Carver, 1964; Whanger, 1974; U.S. Health, Education and Welfare, 1974). In Alberta as elsewhere, the number of persons 85 years and over is rapidly increasing. The frail elderly (including those with organic brain disease which is a frequent cause of disturbed behavior) now make up 15% of the population over 65 years of age (Englemann and Stevenson, 1980).

The need to prepare personnel to care for patients with mental health needs in non-psychiatric settings was highlighted by Blair (1969). The tendency for persons who work with a stigmatized group to also be stigmatized (Goffman, 1963; Smith, 1977), may account for the biases of medical professionals toward the aged (Spence et.al., 1968, Cyrus-Lutz and Gaitz, 1972; Miller, et.al., 1976). Professional training seldom provides organized experiences in treating older persons, and positive role models of faculty or practitioners committed to the care of the elderly are scarce (Holtzman, Beck, and Coggan, 1978). Ward (1977) has concluded that professionals are reluctant to deal with the aged, and that there is age bias in psychiatric consultation due to an assumption that the elderly are less likely to benefit from therapy.

Professionals and institutional staff need instruction, support, and exposure to viable treatment models, as they attempt to care for stigmatized patients. Among the features missing from most current treatment of behaviorally disturbed elderly patients is a systematic attempt to identify and reinforce any remaining health potential. In this study, a treatment program designed to recognize and enhance health potential in the disturbed elderly through the use of behavioral techniques was evaluated.

CHAPTER TWO
THE REVIEW OF LITERATURE AND THE RESEARCH PROBLEM

Introduction to the Review of Literature

Much has been written about the interdisciplinary nature of gerontology. Scholars and practitioners benefit from multifaceted approaches to the generation and application of knowledge, but a practical problem is presented by the scattering of information and ideas across various professions and disciplines.

The most obvious lack of continuity in the above regard exists between the health disciplines and the social sciences. Physicians, nurses, physiotherapists, occupational therapists and others employ and sometimes design psychological tests or treatment programs without reference to the basic knowledge, methodology, or ethical principles of psychology (Stuart, 1973; Krasner, 1976; Birkett and Boltuch, 1977). Limited numbers of psychologists are trained in gerontology, and may apply tests or techniques without due regard for the lack of normative data on the psychologic and intellectual functioning of the aged (Fischer and Pierce, 1967; Carp, 1967; Oberleder, 1973; Goga and Hambacker, 1977). Researchers attempting to study the elderly in institutional environments have encountered difficulties related to patients' functional disabilities (Isaacs and Akhtar, 1972) or to the logistics and ethics associated with the research process (Slater, Lipman, and Harris, 1977).

Medical Evaluation and Treatment of Behaviorally Disturbed Elderly Patients

The behaviorally disturbed elderly are subject to a number of risks which make medical diagnosis both complex and critical. One

such risk is the presence of multiple pathology and atypical presentation of diseases such as hyperthyroidism, non-breathless pulmonary edema, silent pulmonary embolism, afebrile pneumonia, malignant disease, especially of the colon, lung, or breast, myxedema, depression, drug intoxication, surgical abdomen, and myocardial infarction (Besdine, 1979). Non-specific symptoms such as the refusal to eat or drink, falling, incontinence, dizziness, confusion, worsening dementia, or weight loss require more than passing attention. Numerous reversible causes of both acute and chronic organic brain disease are highlighted in a task force report which resulted from the Consensus Development Conference on Treatable Brain Disease in the Elderly at the National Institute on Aging in July, 1978. The medical diagnosis and treatment recommended for demented elderly persons by the experts at this conference is seldom seen even in sophisticated health care agencies (Besdine, 1978).

The elderly are particularly vulnerable to depression and suicide. Resnick and Cantor (1970) advocate an extraordinary degree of suicide prevention in the elderly, before actual threats or attempts occur. They caution that because "normal" aging in western society is a gradual phasing out and reduction of activity, the older person can plan and effect an earlier death than necessary without detection. This is particularly true since numerous self-destructive opportunities are available such as deliberate self-starvation, balking at medically prescribed self-care, hazardous activities or voluntary seclusion. Distinguishing depression from other symptoms or "somatic equivalents" (Gramlich, 1968) is therefore a critical diagnostic problem, particularly since the prognosis for improvement tends to be

optimistic when skillful treatment is instituted (Verwoerdt, 1976). Many instruments exist for the assessment of depression. In his review of these, Gurland (1979) notes that although they can reflect the presence of depression with impressive accuracy, clinical evidence and other factors remain important in establishing a diagnosis.

Psychological Perspectives and Disturbed Elderly Patients

Within psychological theory, studies of sensory deprivation and the behavioral model are most relevant at the present time to the treatment of behaviorally disturbed elderly patients. Such patients frequently suffer from confusion or lack of reality orientation. Reality orientation is defined within the context of sensory deprivation theory as the process of incorporating observed, ordered relationships into a perceptual schema by extracting useful information from a welter of "noisy" sensations (Freedman, 1961, p.19). In their comprehensive review article, Jackson and Ellis, (1971) discuss six types of sensory deprivation studies including those of hospitalized patients. Phenomena experienced by people studied in clinical, laboratory, and field situations have included perceptual, cognitive, emotional, motor, somatic and behavioral experience. Categorization and evaluation of these experiences presents a problem to the researcher (Zuckerman, 1969). The absence of a standardized classification system makes it difficult to make comparisons or to generalize about the clinical applicability of the concept of sensory deprivation.

While the psychological aspects of sensory deprivation have been most extensively studied, the physiological concomitants are also of considerable interest and importance. Bower (1967) hypothesized a link between sensory deprivation and other etiological factors which operate over a period of time to cause senile dementia. Although other theories, notably those with a biochemical orientation, have recently been advanced (Haber, 1978), evidence to discount Bower's theory of "disuse atrophy" in which reduced sensory input leads to reduced adaptive functions and cerebration, is not available. More recently, the close relationship between physical inactivity and sensory deprivation has been emphasized by Oster (1976). Effects to the central nervous and musculoskeletal systems are seen in conjunction with sensory deprivation.

The elderly can be identified to be especially at risk of sensory deprivation because of changes in the sensorium which normally accompany the aging process. Wood (1977) notes that with advancing age the optimum level of stimulation increases and a higher threshold of stimulation is required. Yarrow (1963) indicates that deprivation in the environment is one of the most prevalent aspects of the social and medical problems of the aged, and that environmental deprivations can be separated into sensory affectional, emotional, social and intellectual categories. Most of the treatment modalities advocated for confused elderly persons, have as a central or indirect objective the reduction of and compensation for the effects of sensory deprivation.

One treatment modality for the confused elderly which has been widely recognized in recent years is that of reality orientation. According to Katz (1978) this is basically a re-educative procedure whereby one person continually communicates basic information of time, place, and person to another person who has experienced some degree of confusion in his behavior. Folsom (1968) is credited with originating this treatment approach, and the guidelines for its use. Several controlled studies (Brook, Degun, and Mather, 1975; Katz, 1976; Loew and Silverstone, 1979; Hogstel, 1979) suggest that the use of reality orientation techniques and groups can improve the level of orientation of confused elderly patients. Some accounts in the literature make a point of noting that patients demonstrating disturbances of behavior were excluded from reality orientation groups because they interfered with the participation of other patients or took the full attention of the group leader. Therefore claims for the effectiveness of reality orientation may not apply to patients who exhibit antisocial or dangerous behavior. The rationale for reality orientation is that even in the presence of organic brain disease, intact areas of cerebral functioning remain and can be approached by techniques of psychological intervention which facilitate relearning. Folsom (1968) and Katz (1976) assert that even where chronicity of primary symptoms is found, reversibility of some areas of impairment may occur.

Several other treatment modalities which involve the deliberate use of various types of sensory stimulation have been advocated for use with the confused elderly. Remotivation, resocialization, attitude therapy, reinforcement therapy, milieu therapy, PREVLAB,

sensory retraining, self-image therapy, and reality therapy are described by Barns, Sack and Shore (1973). Of these, sensory retraining (Richman, 1969) and remotivation (Gibson, 1967) are probably the best known. The literature does not specifically discuss their use and effectiveness with the elderly whose behavior is disturbed.

The use of behavioral therapies with the disturbed elderly has been advocated because of their compatabilities with other modalities such as reality orientation, remotivation and the teaching of activities of daily living (Schaeffer and Martin, 1966; Hoyer, 1974; Baltes and Zerbe, 1976; Blackman, 1976). The difficulty in defining behavioral therapies is discussed by Erwin (1978). Important characteristics or defining properties of behavior therapies include a close tie to learning theory and research, and the practice of operationalizing psychological constructs by linking them to specific behavior patterns. Other techniques borrowed from experimental psychology involve the establishment of a base rate so that the frequency of a target behavior after treatment can be compared with its pre-treatment frequency. The therapist may use a single case experimental design to determine whether patients are being helped. Behavioral therapies represent a theoretical model which is psychological, not biological. Problems are divided into their components, and each component or symptom is treated separately and directly. The behavioral approach implies that behavioral deficits may be the result of environmental deficiencies rather than the inevitable consequences of aging. Since the emphasis is on actual behavioral change, it can be individualized and improvement can be increased by

counting the actual increase or decrease in target behaviors.

The moral and ethical basis for employing or not employing behavioral techniques is the subject of far reaching debate. Among the major issues in this debate are the case for and against informed consent, and the use of deprivation. There has been little concern about the issue of consent when reinforcement only was being applied. However, the use of reinforcement to perpetuate a questionable status quo has received attention (Winett and Winkler, 1972; Krasner, 1976; Erwin, 1978). In his discussion of issues involved in obtaining consent for treatment, Nay (1976) summarizes the major components of consent which have derived from legal decisions in the last decade. Legal decisions have defined items which can be used as reinforcers and those that should be provided noncontingently. Patients have a right to a comfortable living space, including a good bed, a closet or locker for personal belongings, a chair and a bedside table, as well as nutritionally adequate meals. They have a right to receive visitors, to attend religious services, to wear their own clothing, to have clothing laundered, to exercise physically on multiple occasions each week and to be outdoors on a regular basis. Nay (1976) comments that the courts have made the task of defining incentives for clients more difficult, in that a more elaborate assessment of idiosyncratic client preferences and the way in which basic rights can be satisfied must now be considered. However, he believes that such carefully defined, individually tailored reinforcers are much superior to those that are generally applied across large groupings.

As recently as 1966, Cautela wrote that the literature revealed a dearth of investigation and speculation concerning the application of

behavior therapy to the institutionalized geriatric patient. During the following decade, this situation was dramatically altered. Worthington and Glamser (1977) discuss three types of behavior modification that are applicable to the elderly. Reciprocal inhibition techniques such as desensitization, assertive training and aversion therapy may be used in instances where fear is the central component of maladaptive behavior. It is suggested that these techniques may be most appropriate for use with staff to help them become more comfortable in working with the elderly and to decrease their resistance to change so that new methods can be tried. Operant conditioning techniques focus upon the identification of behavioral excesses or deficits and the modification of these behaviors by the application or withholding of reinforcers. Environmental manipulation, that is the development of specialized prosthetic environments, is also considered appropriate.

Operant techniques are among those which have been researched to the extent that claims for their effectiveness in particular situations may be made. The operant model is considered to be one of the most adequate approaches to both research and interaction with the elderly (Hoyer, 1973; Labouvie, et.al., 1974; Hoyer, Mishara and Riedel, 1975; Baltes, 1976). Target behaviors which have received attention include self-care skills (Libb and Clements, 1969; Geiger and Johnson, 1974; MacDonald and Butler, 1974; Baltes and Zerbe, 1976), psychotic symptoms such as striking out and screaming (Mishara, et.al, 1973; Baltes and Cascombe, 1975), intellectual behaviors (Hoyer, et. al., 1975), and social skills (Hoyer, et.al., 1974; McClannahan and Risley, 1975).

Within the literature, three types of studies in which operant techniques are used with disoriented, demented or intellectually impaired patients in institutions are described. A study reported by Steffy (1970) is typical of those in which token economy procedures are applied across a group of regressed and aggressive patients in the back ward of a mental hospital. Two treatment goals were chosen which would help staff look after the patients more efficiently. The 34 patients in the study had various diagnoses, many of which had functional components, and remarkably, two patients were undiagnosed. The actual extent of organic illness or depression was not noted; however, the presence of both is strongly suggested in a section of the report which describes an "accommodation" in the token economy procedures which had to be made for a group of patients for whom the procedures were "too demanding" (Steffy, 1970, p. 197). Since Steffy and others who report similiar studies do not indicate which patients improved, unanswered questions remain. In particular, it is not clear whether promising outcomes occurred because patients learned how to cope with the expectations of staff, or because the staff experienced a Hawthorne effect which allowed them for the first time to reinforce health potential in the patients. Studies of this kind do not meet the legal and ethical standards referred to previously. They provide examples of situations in which group treatment and total acceptance of a non-medical model are inappropriate.

An example of a second, and more acceptable type of study, is that presented by Pollock and Liberman (1974). Six incontinent, male patients ranging in age from 61 to 79 years were carefully selected on the basis of dementia resulting from organic brain syndrome, and

the ability to carry on a simple conversation. After base line rates for incontinence were obtained, treatment procedures which eliminated any social reinforcement for incontinence were instituted. An aversive contingency (having patients conduct their own clean-up activities after being incontinent) and reinforcement for being dry were part of the treatment. Results of the study were negative, leading the researchers to question their selection of reinforcers, and to note gaps in the reinforcement procedure because some patients were unable to find the bathroom. The need for a shaping procedure to help the demented patients learn the series of acts which made up the target behavior was recognized.

The above study raises interesting questions about the relationship between memory deficits and social reinforcement. Pollock and Liberman (1974) suggest that subjects with the least mental impairment would be most likely to develop a behavior such as incontinence as a result of social reinforcement from institutional staff. It is of particular interest that the only other study in which behavioral techniques were employed with demented, incontinent patients (Grosicki, 1968) was also inconclusive. These studies make a valuable contribution by suggesting ways in which selection of subjects, reinforcers and interventions can be refined.

A third type of study is that described by Hollon (1973) in which selective praise and attention were used as reinforcers in individualized programs with two intellectually impaired patients. The target behaviors chosen were co-operative, self-helping activities which were incompatible with, and hence served to inhibit, disruptive, unmanageable

behaviors. Such programs are highly acceptable from a professional and ethical point of view. They are individually designed to take into account a long range treatment goal for each patient. The treatment program encourages staff to become careful observers of all of a patient's behaviors in order to identify potential constructive patterns which they can then encourage and reinforce. Interaction between staff members and patients becomes less aversive for both parties. The patient receives a benefit of special attention which leads to progress in physical rehabilitation.

In summary, it is clear that operant techniques are an effective means of modifying the behavior of institutionalized people including the elderly. Behavioral therapy is based on the premise that behavior results from environmental contingencies and not illness. However, it seems questionable to attempt to modify through conditioning, behaviors which may be irreversible in the elderly due to physical causes. Few reports in the literature provide sufficient information about the process for initial assessment and selection of subjects to permit generalization or replication. There is the possibility that reported results have appeared unusually encouraging because patients were regressed due to effects of institutionalization and not organic disease, and were therefore capable of making logical adaptations to altered contingencies. On the other hand, the potency of the approach may be under-estimated if it has been applied to a group of patients with organic impairment severe enough to interfere with learning simple cause and effect relationships.

Cautela (1966) recommends an approach to the application of behavior therapy on a geriatric ward which appears appropriate in light

of current knowledge. He cautions that until controlled studies are done with geriatric populations, generalizations drawn from work with the mentally retarded and the psychotic population should not be assumed applicable to an elderly person functioning in a maladaptive manner. The quality, intensity and scheduling of reinforcing stimuli may differ with the geriatric patient, and reduced sensory input due to the aging process and the reduced conditioning rate in the geriatric patient may require a different relationship between reinforcement and behavior.

Nursing Literature Considering the Elderly With Disturbed Behavior

Although nurses have probably had more occasion to work with disturbed elderly patients than any other professionals, there is little in the nursing literature pertaining directly to the assessment of management of these patients. Discussions of how to deal with patients presenting violent behavior are available (Cobb, 1976; Coffey, 1976; Phillips, 1977) but these seldom mention the elderly specifically. The management of behavior such as wandering is alluded to by various writers, and it is generally agreed that interference with such behavior serves no useful purpose and may serve to further agitate the patient. The importance of habit and repetition in ward routine and activities of daily living have been noted (Smith, 1970; Irvine, 1978). Several discussions of group work with the regressed or institutionalized elderly are available (Blake, 1973; Ebersole, 1976; Taulbee, 1966; Burnside, 1973; 1976) but assessment and patient selection are considered in very general terms.

Nursing interventions relating to various theoretical models within psychology have been described. Matheney (1966) discusses "threats" to personality organization as a result of stroke. Moses (1972) observes that denial, rigidity and counterphobia can be helpful to the elderly if not carried to extremes, and recommends that nurses support the elderly in these defenses. Chodil (1970) describes nursing interventions which are appropriate for five different levels of sensory deprivation, and techniques, for making and maintaining contact with the socially isolated have been addressed (Carlson, 1962; Harrison, 1968; Black, 1973). Nurses have employed behavioral techniques in the treatment of physical symptoms such as incontinence (Maney, 1976) or to reinstate activities of daily living (Baltes and Zerbe, 1976). A behavioral model for nursing has been described by Walsh, (1976). Behavior modification used in conjunction with the nursing process has been advocated (Berni and Fordyce, 1973).

Nurses have also been concerned with whether elderly patients with disturbed behavior should be grouped together or segregated from mentally sound patients. Although popular wisdom suggests that integration of disturbed patients with the mentally sound is likely to improve or maintain functioning in the disturbed group, this belief is not supported by scientific evidence (Kellam, 1961; Nathenshon, 1969; McClannahan, 1973). Professionals who have attempted to work constructively with disturbed patients express the view that segregation is appropriate because of the stress they cause mentally sound patients in the same environment and because special programs for disturbed patients can then be designed (Smith, 1970; Ornstein, 1970; Risdorfer,

1970; Tuck, 1971).

In their research efforts, nurses have begun to examine the effectiveness of interventions which have been advocated in anecdotal contributions to health care literature. Studies such as that by Grosicki (1968) of a behavioral approach to the treatment of incontinence or Hogstel's (1979) study of reality orientation with confused nursing home residents produced inconclusive results but lay important methodological groundwork . Studies by Brown and Brown, 1970 and Williams, Holloway et.al (1979) which directly sought to identify the impact of specific nursing activities on the prevention or amelioration of confused states are especially interesting. The work of Wolanin (1977) which attempts to define confusion and develop ways of measuring it within a nursing context utilizes grounded theory methodology which leads to theory generation. Two categories of cognitive and social inaccessibility emerged from her analysis of nurses' and physicians' descriptions of patients' behavior. These categories may provide a useful basis for assessment and intervention in the future.

Summary of the Review of Literature

Disturbed elderly patients most frequently present with a multiplicity of physical and psychosocial problems. Thorough and expert medical diagnoses is essential as a means of identifying and treating reversible causes of acute and chronic brain disease and as a basis for the selection of medical or non-medical treatment interventions. Theory deriving from studies of sensory deprivation is useful in identifying possible causes of confusion, disorientation and disturbed behaviors in the elderly. This body of knowledge has given

rise to a number of useful treatment interventions which are beginning to be formally evaluated. Behavioral models and interventions have been used in treating disturbed elderly patients but require formal evaluation particularly in regard to their appropriateness and effectiveness with demented patients. Behavioral models can be expected to become increasingly valuable in staff education as well as in the treatment of patients. Both sensory deprivation and behavioral theory have been applied to nursing practice and research. Specific treatment approaches for the elderly with disturbed behavior have not been adequately described or evaluated.

The Research Problem and Hypothesis

A review of literature pertaining to the care of institutionalized elderly patients with disturbed behavior raises more questions than it answers. A pilot study carried out in the 100 bed auxiliary hospital which was the study setting revealed that 53.2% of a sample of 47 patients had demonstrated behavior which was dangerous to self or others. There was an urgent need to improve the management of these patients and staff. A decision was made to develop a treatment program in which behavioral techniques would be utilized with other methods to accomplish this goal. The program was to be evaluated by means of an exploratory and descriptive field study.

The research problem was to ascertain whether there would be improvement in the behavior of disturbed elderly patients with the introduction of a treatment program characterized by increased numbers of purposeful interactions by staff with patients and the development of an

individualized goal-directed behavior management plan for each patient. It was hypothesized that improvement in the behavior of patients would occur with the introduction of the program. Improvement in the behavior of a patient was operationally defined as an increase or decrease in the frequency of specified target behaviors as defined by a total consensus of the patient care team and as recorded in the patient's chart.

Other Research Questions

Three additional research questions were posed. These were as follows:

1. What will be the outcome of the patient treatment program as reflected by the number of transfers or discharges of special care patients from the program and the hospital?
2. Are the treatment methods selected for use in the program appropriate and practical in the study setting and what, if any, modifications in the program are indicated?
3. Are the staff in the study setting willing to learn and implement behavioral approaches to the management of disturbed elderly patients?

Questions one and three were to be answered on the basis of one years' experience in the program. Question two was to be answered on the basis of four months' experience so that any modifications deemed necessary could be incorporated for the final eight months.

CHAPTER THREE
THE STUDY SETTING AND SUBJECTS

The study was carried out in a designated 20 bed area of a 100 bed auxiliary hospital (Lethbridge Rehabilitation Hospital). The rehabilitation activity as evidenced by the number of yearly admissions and the length of stay was greater than in most auxiliary hospitals in Alberta.[1] Staffing levels were average when compared to other hospitals,[2] although a consulting geriatrician had reported that all departments were inadequately staffed (Irvine, 1979).

An application of the critical incident methodology (Flanagan, 1954; Flanagan and Schmid, 1959) was employed in a pilot study to objectively demonstrate the presence of patients with disturbed behavior that might be harmful, threatening or destructive to themselves or others (Appendix A). Criteria for disturbed behavior were developed in the pilot study. These were used to select patients for a treatment program which was implemented in the 20 bed area designated as the special care unit. Over a one year period, 45 patients demonstrated critical behaviors which met the admission critieria for the program (Table 1).

A majority of patients in the study group demonstrated behaviors defined as dangerous to themselves or others. Most patients were referred from acute care hospitals. Others came from nursing homes or community settings. (Table 11).

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1. Canadian Hospital Directory, 1977
2. Statistics Canada Hospital Profile, June 30, 1977 and Alberta Hospitals and Medical Care Level of Activity, Staff Utilization and Cost Indices, June 30, 1977.

TABLE 1

REASONS FOR ADMISSION TO SPECIAL CARE UNIT*

Critical Behavior Resulting in Admission	Number of Patients Admitted over a One Year Period
1. Withdrawl, psychosis or suicidal behavior	13
2. Extreme agitation or constantly noisy	13
3. Outbursts of physical aggression toward other patients or staff	8
4. Confusion involving attempts to leave the hospital or interference with the rights, privacy or possessions of other patients	12
5. Refusal of essential care or medications	5
6. Behavior pattern is the reason why progress toward other rehabilitation goals is not being made or why patient remains in hospital	27
7. Behavioral assessment is indicated	2

* Some patients exhibited more than one behavior disturbance

TABLE 11

SOURCES OF REFERRAL OF PATIENTS

IN SPECIAL CARE UNIT

Source of Referral	Number of Patients Referred over a One Year Period
Home or Senior Citizens' Lodge	13
Nursing Home	11
Acute Care Hospital	21
TOTAL	45

TABLE 111

AGES OF PATIENTS IN SPECIAL CARE UNIT

Age Group by Years	Number of Patients over a One Year Period
20-29	3
30-39	1
40-49	2
50-59	3
60-69	6
70-79	17
80-89	12
90-99	1
TOTAL	45

A majority of patients were over 69 years of age (Table III) although some young adults or middle-aged adults with physical and/or mental handicaps were included because they had demonstrated critical behaviors. The minimum age was 25 years; maximum age was 95 years. The mean patient age was 69.8 years. Twenty-four females and 21 males were included in the study group.

Most patients in the study had three or more medical problems of a physical nature. Only 28% had a primary diagnosis which suggested the presence of a behavior problem. This percentage was even lower than the 53.3% noted in the pilot study and suggests that the inadequacies in medical and nursing assessment noted in the literature were present in the settings from which patients were referred. When the secondary diagnoses were added, the percentage of patients whose reported medical condition indicated the possibility of behavioral problems rose to 62.2%. Many patients presented with more than one functional or physical deficit. These are summarized in Table IV.

Table V presents the extent of visitor involvement with patients in the study group. These figures reflect a willingness of friends or relatives to remain involved with patients, despite their antisocial or disturbed behavior.

TABLE IV

SUMMARY OF FUNCTIONAL AND/OR PHYSICAL DISABILITY OF PATIENTS IN SPECIAL CARE UNIT*

Type of Disability	Number of Patients with Disability in a One Year Period
BLIND	8
Vision severely impaired	4
Vision moderately impaired	4
DEAF	8
Hearing severely impaired	1
Hearing moderately impaired	7
APHASIA	13
Total	5
Partial	8
INCONTINENT	21
Always	4
Sometimes	17
REQUIRE FEEDING	20
Always	12
Sometimes	8
HEMIPLEGIA	1
QUADRIPLEGIA	5

* Some patients have more than one functional or physical disability.

TABLE V

VISITS BY RELATIVES OR FRIENDS TO PATIENTS IN SPECIAL CARE UNIT

Visiting Pattern	Number of Patients
Patients with no regular visits (monthly or less)	15
Patients with regular weekly visits	15
Patients with regular daily visits	15

CHAPTER FOUR

PROCEDURES FOR BEHAVIORAL MANAGEMENT AND DATA COLLECTION

Process and Content of Treatment Program

A 20 bed area within the hospital was designated as a special care unit. A program was developed which employed several group treatment approaches to the confused elderly which have received attention in the literature. Various policies, procedures and process tools were developed to implement the program. These materials and information about how the program was implemented are presented in Appendix B.

Behavioral criteria which had been developed during a pilot study were used to select all patients who would be admitted to the special care unit. An external expert assisted with the initial selection of patients according to the admission criteria. The criteria for admission to the special care unit were as follows:

1. Withdrawal, psychosis, or suicidal behavior.

2. Extremely agitated or constantly noisy.

3. Outbursts of physical aggression toward other patients or staff.

4. Confusion, involving attempts to leave hospital and/or interference with rights, privacy or possessions of other patients.

5. Refusal of essential care or medication

6. A behavioral pattern which interfered with progress toward other rehabilitation goals or was the reason why patient remained in hospital.

7. A behavioral assessment was indicated.

If, during the initial few weeks of hospitalization or later, there was a consensus among the interdisciplinary patient care team that a patient demonstrated behavior meeting these criteria, the patient was transferred to the special care unit. At the time of admission to the special care unit a Patient Profile was completed (Figure 1). The particular behavior resulting in the patient's admission to the unit and the admission criteria to which it corresponded were recorded on the Patient Profile.

Individual Plans for Behavioral Management

Following admission of a patient to the special care unit, a systematic assessment of behaviors which had resulted in admission to the unit was initiated. The objective of this assessment was to establish the precise nature of a behavior, its frequency, antecedents and consequences. A form for the assessment of critical patient behavior was developed for this purpose and is shown in Figure 2. This assessment of behavior provided the necessary baseline information which could be used to formulate and evaluate a behavioral management plan.

The initial period of behavioral assessment usually took two weeks although in some cases the period was longer. Information gathered during the assessment period formed the basis for a behavioral management plan for each patient. These plans were developed by registered nurses using input from other professional and non-professional staff members. The most valuable input for these plans frequently came from the nursing aides or attendants who spent the majority of their working day in direct contact with the patients. The format for the behavioral management plan is shown in Figure 3. The purpose of the plan was to provide staff with

specific instructions which would enable them to use interaction and other types of reinforcement to achieve the goals of care and help retrain the patient to socially acceptable and reality oriented behavior. Each behavioral management plan consisted of four parts: the behavioral goal, descriptions of target behaviors to be increased or decreased, directions for staff responses to the patient's behavior, and progress notes relevant to the particular behavior.

Choosing the Behavioral Goal and Target Behaviors

The behavioral goal was explained to staff as a general statement of what the patient might eventually hope to achieve, such as:

> Will learn to accept feeding, toileting or morning care from any member of the staff
>
> or
>
> Will regain a sense of privacy and request nurse to draw curtains around her bed before she uses the bedpan.

The target behaviors chosen could all relate to the same general goal, or they could relate to more than one goal. The target behaviors were interpreted to staff as small steps that could help the patient reach the goal. For example, going on outings with the recreation department would have to be preceded by learning to eat and drink in an upright position, remaining dressed and continent for up to two hours, etc. In selecting the goal, the original reason for the patient's admission to the special care unit was considered.

An attempt was made to identify two "positive" or neutral target

FIGURE I

PATIENT PROFILE FOR SPECIAL CARE UNIT

Name: _____ Date of Birth: _____

Home or Permanent Residence: _____

_____

Next of Kin or Responsible Person: Name: _____ Telephone _____

Address: _____ Telephone _____

Other important Social Contacts: _____

_____

Attending Physician: _____

Other Doctors Who Have Visited or Consulted: _____

_____

Details of Admission to Lethbridge Rehabilitation Hospital:

Date: _____

E.D.D. _____

Reason for Admission: _____

Health Deficits Present: _____

_____

_____

General Goal of Care in Lethbridge Rehabilitation Hospital: _____

_____

_____

Reason for Admission to Special Care Unit: _____

_____

_____

SPECIAL CARE PROGRAM GOALS

To Increase the Following Behaviors:

1.

2.

To Decrease the Following Behaviors:

1.

2.

FIGURE 2

FORM FOR ASSESSMENT OF CRITICAL PATIENT BEHAVIOR

NAME: _____ AGE: _____ ADMISSION DATE: _____

MEDICAL CONDITION: _____

Critical Behavior	Date	Exact Time	Events Leading Up To Behavior	Description of Behavior	Events Following Behavior	Staff Member Observing

FIGURE 3

BEHAVIORAL MANAGEMENT PLAN FOR SPECIAL CARE UNIT

NAME: _____ AGE: _____ ADMISSON DATE: _____

MEDICAL CONDITION: _____

BEHAVIORAL GOAL: _____

_____

Behavior To Be Encouraged	Staff Actions - Environmental Consequences	Behavior To Be Ignored or Discouraged	Staff Actions - Environmental Consequences

behaviors for reinforcement. The two behaviors perceived to be most problematic were also identified. It was not always possible to identify two behaviors in each category. General stereotyping and labelling of patients as "confused","violent", " a problem". "dirty", "inappropriate", had been common. The existence of "positive" behaviors or health potential had tended to be ignored. Of necessity, considerable amounts of attention, sometimes of several staff at once, had been paid to behaviors such as incontinence or striking out. Behaviors such as swearing, spitting, masturbation, spilling food or drink resulted in varying amounts of staff attention, sometimes involving physical contact and usually verbal fussing and scolding. Undesirable behaviors were viewed as inevitable and irreversible aspects of the overall stereotype applied to the patient. The exercise of identifying target behaviors for reinforcement drew attention to aspects of behavior which seldom had received reinforcement.

Selection of two target behaviors to be decreased was sometimes difficult because so many problematic or antisocial behaviors were present. Learning to describe the behaviors in concrete terms had immediate benefit in that it eliminated the use of stereotypic words which had served as cues for staff responses. Having to choose the "worst" behaviors from the patient's repertoire resulted in a sharing of values and feelings and frequently revealed that not all staff members responded the same way to the same patient or even the same behavior. It was frequently possible to determine by consensus that behaviors such as swearing or masturbation were problems to the staff but not necessarily to the patient, and then

to gain agreement to ignore such behavior. Behaviors which interfered with the rights, safety or privacy of others could not be ignored. In these cases, specific directions for staff to follow were developed to limit the amount of social reinforcement being given while resolving the situation. Staff were instructed to write the four target behaviors chosen on the Patient Profile and then to complete some behavioral management plan for each of the target behaviors. The Patient Profile and the behavioral management plans became permanent parts of the patient's record and were used as the major source of data for the study.

The columns on the behavioral management plan entitled "Behaviors to be Encouraged" or "Behaviors to be Discouraged" contained a detailed description of the target behaviors. Staff were instructed to consider the questions "What will the patient be able to do?" and "When, how often or under what circumstances will the patient perform the specified behavior". General statements such as "increase social participation" were to be avoided in favor of a more specific statement such as "Will voluntarily come out of room after being invited once by staff."

In the column "Staff Actions or Environmental Consequences" specific instructions to guide staff interaction with the patient were written. The interpersonal or environmental factors which might have been helping to encourage or maintain a problem behavior were considered. Characteristics of effective reinforcers were reviewed with staff and much time was spent deciding upon appropriate reinforcers for each patient. There were limited numbers of reinforcers which could be totally controlled by staff; for example, visits by physicians, which were reinforcing for some patients, tended to occur either at random intervals or after the patient

had problems. Some reinforcers, such as visits by family members, could not be administered immediately after a behavior had occurred. Directions for staff responses were to be as specific as possible. An example of such a direction is as follows:

> Whenever Mr. X makes a request or initiates conversation, look directly at him, give your full attention for a few minutes, respond, using his name, and giving praise, e.g. "I'm glad you asked me to help you, Mr. X."

In some cases a more detailed shaping procedure which would help to resocialize or re-establish activities of daily living would be specified. An example is as follows:

1) Set Mr. X up at the table not facing a window (He sees better when not facing bright light)

2) Place cutlery on right side of tray where he can reach it with his good hand.

3) Place napkin in his lap and remind him it is there.

4) Name each food as you give it to him and ask him to tell you how it tastes.

5) Alternate solid food and fluids, etc.

In completing progress notes, staff were directed to note the date, time, place and others who were present as well as the words or actions of the patient which were considered significant in relation to the target behaviors.

Once the behavioral management plan was finalized it was discussed with the patient and his or her significant others. The responsible person was asked to sign an informed consent for the participation of the patient in the program. The plan was then put into effect. Weekly conferences of team members in the special care unit were held to discuss progress being made toward the treatment goals and, where

necessary, to revise the treatment approach. The conclusion as to whether target behaviors were increasing, decreasing, or remaining constant was the verbalized and recorded consensus of the total treatment team.

Individual Care and Activities of Daily Living

Because of the high degree of functional disability of patients in the special care unit, individual care activities and assistance with the activities of daily living (A.D.L.) consumed a major portion of staff time. Staff-patient contacts as physical care was being provided or supervised were thus of critical importance and provided many opportunities to observe behavior and respond to the target behaviors in accordance with the behavioral management plans.

In general the special care program used activities of daily living as a vehicle to enhance the dignity of the patients by offering choices and reinforcement or by teaching skills. While the target behaviors represented appropriate short term goals of care, these needed to be considered in relation to diagnosis and prognosis. Since staff had reason to believe that discharge was not a realistic goal for patients in the program, long range goals that addressed the quality of life for the patient in the institution were important, both for the well being of patients and to maintain the morale of staff. With respect to functional ability, patients in the special care unit could be divided into four types. These types and the focus of personal care are shown in Figure 4.

Other Components of the Treatment Program

In addition to their individualized behavioral management plans,

FIGURE 4

FOCUS OF CARING ACTIVITIES FOR FOUR TYPES OF PATIENTS IN THE SPECIAL CARE UNIT

Type of Patient	Focus of Caring Activities
Young or Middle-Aged Adult, Mentally Handicapped	- teach self care skills - teach social and decision-making skills with awareness of consequences - encourage choices and development of individuality.
Middle-Aged Adult, Physically Handicapped	- maintain or improve self-care skills - maintain choices and areas of control where possible - prevent complications - improve social skills
Elderly Adult, Mentally Handicapped	- maintain or improve self-care and social skills - maintain choices and areas of control where possible
Elderly Adult, Mentally Handicapped and Physically Dependent	- maintain or improve self-care and social skills - prevent complications

most patients were involved in a more stimulating and active daily routine than had been the case before the program commenced. Several activities were added: refreshments served in the solarium adjacent to their unit, therapeutic activities organized three times a week by the occupational therapy department, increased socialization, some organized activities in the evening, and specially designed outings for physically able patients. In addition, some patients in the unit participated in reality orientation or remotivation groups.

Illustrative Case Studies

The Case of Mr. F.

Mr. F. was a large man in his early seventies who had a number of medical conditions including diabetes, arteriosclerotic heart disease, obesity, cataracts (blindness in one eye), and degenerative arthritis. He was admitted to hospital because he had cancer of the rectum and was not expected to live more than a few months. At the time of his admission, he was physically strong, although confined to a wheelchair, and had frightened other patients by driving his wheelchair against theirs, or shouting. He had struck at staff with his cane on several occasions, and was considered a candidate for admission to the special care unit under criterion No. 3: "Outbursts of physical aggression toward other patients or staff".

Mr. F's pride in his personal appearance was considered an appropriate target behavior for reinforcement. Another behavior to be reinforced was asking promptly and appropriately for what he needed from staff, since some of his outbursts occurred when his requests had not been attended to immediately. Striking out, ramming others with his chair, or loud shouting were identified as target behaviors to be decreased. Staff actions to encourage the positive behaviors included praising him for a well groomed appearance, and making a point of asking if there was anything he needed. This was particularly important with respect to analgesic medication which he did not request although it could be assumed that he had pain. This medication was offered regularly.

When Mr. F. struck at someone or shouted, he was to be wheeled to a

location away from others and left alone. Although one staff member could wheel his chair, a second one was to be available. No scolding or conversation with Mr. F. was to occur until fifteen minutes after the outburst. If he refused to co-operate with necessary care, Mr. F. would be told that he would not receive the whiskey ordered for him by the doctor. The behavior of Mr. F. partially improved and staff became less afraid of him as incidents of striking out decreased. He continued to shout occasionally. His physical condition slowly deteriorated and he died 6 months after his admission to the unit.

The Case of Mr. G.

Mr. G. was a 39 year old Hungarian refugee who became ill shortly after his arrival in Canada. He was quadriplegic, probably as a result of multiple sclerosis. For many years he had not been dressed or out of the hospital and had been fed his meals in bed. He had developed a habit of loudly grinding his teeth which made it impossible to place him in a room with other socially aware patients. When distressed by something, he had what the staff referred to as "temper tantrums" which involved spastic, writhing movements which made it impossible to approach or do anything for him. It was assumed that he could not speak English but that he was oriented to reality. He had shown some increased social accessibility through one-to-one contact with a student summer employee over a several month period and he was admitted to the special care unit under Criterion No. 3 and No. 6: "Refusal of essential care or medication" and "Behavioral pattern is the reason why other rehabilitation goals (in this case social goals) are not being met". Teeth grinding was identified as a behavior to be discouraged. Staff were instructed to ask him once if he could stop and to avoid

placing him in any group situation where he might become the center of attention since this increased the grinding. A behavior to be encouraged was "appropriate social response to other patients and staff". Instructions for staff related to this behavior were:

> Initiate conversation and interaction. Tell him about yourself. At social events situate near Mr. B. Ask questions which can be answered by yes and no. Give him your complete attention when interacting with him. Talk to him as an adult. Call him George instead of Georgie. Situate so as to facilitate social interaction. Do not leave him alone facing outside in the solarium. To become friends approach him when there are no other people around as he tends to get nervous with a lot of people paying attention at one time.

Staff response to the "temper tantrums" was to be as follows:

> Attempt to determine if there is something he wants by asking questions which can be answered by yes or no motions of the head. If he indicates no cause and you can't determine it, isolate him in his room behind the curtain. Remove all stimulation such as T.V. Leave him for 15 minutes and return. If he is calm, return him to the activity he was engaged in and provide a few minutes of conversation.

Another behavior to be encouraged for Mr. G. was eating while sitting up in his chair. A shaping procedure initiated by one staff member and gradually extended to include others was developed.

Over a period of several months teeth grinding decreased and Mr. G. became more able or willing to indicate his needs by shaking or nodding his head in response to staff questions. The tantrums decreased, he became more comfortable in social situations with other patients and he accepted being fed sitting up in his chair. He was eventually transferred from the special care unit to another, less intensively staffed, area of the hospital. Discharge to a nursing home was not possible because of his degree of physical dependence.

The Case of Mr. H.

Mr. H. was admitted to the hospital some months following a stroke when his wife complained about his "violent" behavior. He was unable to walk but had the use of one arm. He had considerable difficulty with speech compounded by the fact that his original language was Ukranian; however, he could make himself understood. He struck out at staff on several occasions while they were bathing or dressing him, and was admitted to the special care unit under Criterion No. 3: "Outbursts of physical aggression toward other patients or staff".

The target behavior to be decreased for Mr. H. was striking out. Staff were instructed to interrupt care and leave the room when this behavior occurred. Behaviors to be encouraged were attempts at speech and self-feeding. Since Mr. H. had almost completely given up feeding himself it was necessary for a staff member to work with him on a one-to-one basis. A shaping procedure, similiar to that described on page 34 was developed and instituted. Over a period of several months, incidents of striking out became non-existent. Mr. H. spoke more frequently and revealed a sense of humor and enjoyment during group activities with other patients. He began to feed himself and eventually would do so for any member of the staff if his tray was set up properly. He was first transferred from the special care unit to a less intensively staffed area of the hospital and finally to a nursing home where he made a good adjustment.

Data Collection in Relation to the Research Problem

Data relevant to the problem were collected for each patient from

several sources. The medical and nursing histories taken before or at the time of admission to the hospital, the medical progress notes and the nursing notes in the patient record were used to initially identify patients whose behavior met the criteria for admission to the special care unit. The reason why each patient was admitted to the unit was recorded on the Patient Profile. The Form for Assessment of Critical Behavior recorded the baseline record of each target behavior. Target behaviors and the approaches used in response to them were described in detail on the Behavioral Management Plan for each patient. The patient's behavior relevant to the target behaviors was recorded on the progress notes.

Ideally, numerical pre-treatment frequency counts for each target behavior would have been compared with frequency counts of the same behavior at various measurement points during the study as a means of documenting improvement. This was not feasible in view of the number of personnel working with and observing patients. Furthermore, the limited time for any but direct patient care activities meant that keeping written records could not be given priority. Improved patient behavior in this study was defined as an increase or decrease in the frequency of one or more target behaviors. Since the target behaviors as perceived by staff were the reason patients were admitted to or remained in the special care unit, staff preceptions of improvement in these target behaviors were considered a suitable, albeit less precise, data source.

Weekly conferences were conducted by a registered nurse and included all levels of staff working in the special care unit. A consensus of all

staff in the unit was important if consistency in implementing the behavioral management plans was to be achieved. Since staff had to live with the consequences of their own decisions and recommendations at the conference and since the group varied as staff had days off or rotated to other shifts, there was control of bias in the consensus development process. Recommendations for transferring patients from the unit or discharging them from the hospital originated at the unit-level patient care conferences and were taken forward to a hospital-wide interdisciplinary conference. Placement decisions made at the hospital-wide conference were minuted to meet requirements for hospital accreditation. The adjustment of special care patients after discharge or transfer constituted a valuable validity check of staff members' perceptions of patient improvement.

Data Collection Related to the Other Research Questions

The first research question had to do with the outcome of the treatment program as it was reflected by the number of transfers or discharges of special care patients from the unit and the hospital. Statistics were kept to document transfer of patients from the special care unit to another area of the hospital or discharge of special care patients to community settings (their homes or a Senior Citizen's Lodge) or to nursing homes. Since the rate of discharge or transfer for behaviorally disturbed patients prior to the introduction of the special care program had been zero, any improvement in this rate for this group of patients was considered indicative of a positive program outcome.

The second research question was concerned with the effectiveness of the group treatment methods chosen for the program. It also sought to identify ways in which the program should be modified. Records were kept

noting patients' responses to various types of stimulation and to the group activities. In addition, staff comments and anecdotal information contributed to the evaluation of program effectiveness.

The final research question was concerned with whether the staff of the unit demonstrated a willingness to learn and implement behavioral approaches in the management of behaviorally disturbed elderly patients. It was assumed, and indeed, hoped, that a Hawthorne effect would occur among the staff. All levels of staff were encouraged to record their observations of the patients in writing, where formerly narrative records had been written only by the professional staff. Evaluation of the program using the written records as a data source would have required a level of research funding and capability that was not possible within the setting where there were few professionals and where so much staff time was taken up by the necessities of physical care. For similiar reasons, no formal attempt was made to measure attitude change in the staff. However, subjective impressions gained from patient records and from the behavior or comments of staff were recorded anecdotally where possible to provide a sense of the process and the milieu within which the program evolved.

CHAPTER FIVE

RESULTS, DISCUSSION AND IMPLICATIONS FOR FURTHER STUDY

Results Related to the Research Problem and Hypothesis

The research problem was to ascertain whether there would be improvement in the behavior of disturbed elderly patients with the introduction of a treatment program characterized by increased numbers of purposeful interactions by staff with patients, and the development of an individualized goal-directed behavioral management plan for each patient. It was hypothesized that improvement would occur with the introduction of the program. Forty-five patients were admitted to the program over a one year period. Table VI shows that 23 out of the 45 patients, or 51.1% showed some improvement. The three mentally handicapped young adults had shown improvement but remained in the special care unit. A total of 19 patients had improved sufficiently to result in their transfer out of the unit. These results supported the hypothesis.

Results Related to the First Research Question

The first research question was concerned with the outcome of treatment in the special care unit as reflected by the placement of patients at the end of one year. Table VII shows that at the end of one year, four, or 8.8% of patients had improved sufficiently to warrant their discharge to community settings. A total of 10 patients or 22.2% had improved sufficiently to result in their transfer to nursing homes. Prior to introduction of the program and study, there had not been any discharges of patients with disturbed behavior. A discharge rate from the unit of 31.1%

TABLE VI

OUTCOMES OF BEHAVIORAL MANAGEMENT PLANS IN THE SPECIAL CARE UNIT

Patient Outcome	Number of Patients After 12 Months
No improvement in target behaviors; maintained under supervision of special care unit	13
Some improvement in target behaviors but remains on special care unit	* 4
Improvement in target behaviors to permit transfer out of special care unit	5
Improvement in target behaviors to allow discharge from hospital	14
Deterioration of physical condition determined transfer out of special care unit	4
Deceased	** 5
Total	45

* Includes mentally handicapped young adults
** All were over 65 years of age

TABLE VII

PLACEMENT OF PATIENTS FROM SPECIAL CARE UNIT

Location of Patients	Number of Patients Over A One Year Period
Remained in special care unit	17
Transferred from special care unit but remain in auxiliary hospital	9
Transferred or awaiting transfer to nursing home	10
Discharged home or to Non-institutional community setting	4
Deceased	5
Total	45

was therefore considered a very positive outcome.

Results Related to the Second Research Question

The second research question asked whether the treatment methods selected for use in the special care program were suitable or should be modified. For the initial four months of the program, aides were asked to rate the patients' response to music, visual and interpersonal stimulation. Table VIII shows that most patients either indicated interest or responded in some fashion to these stimuli. Interpersonal contact appeared to be the most effective form of stimulation for these patients.

TABLE VIII

RESPONSE TO STIMULATION BY PATIENTS IN SPECIAL CARE UNIT OVER THE INITIAL FOUR MONTH PERIOD

Behavior Pattern	Type of Stimulation		
	Music (24 Participants)	Visual (26 participants)	Interpersonal (26 participants)
Remained passive or unresponsive	4 out of 24	4 out of 26 (2 patients had difficulty seeing)	2 out of 26 (1 patient was in a catatonic state)
Indicated interest and/or attention	8 out of 24	13 out of 26	9 out of 26
Responded and/or participated	12 out of 24	9 out of 26	15 out of 26

Aides were also asked to assess the degree of patient participation in the various group programs. Results are presented in Table IX. The results indicate that during the initial four months, a majority of patients demonstrated interest or actively responded in the groups. The experience during the initial four months of the program suggested that the types of stimulation and group treatment methods selected were appropriate. Some minor modifications in the program were made at the end of the fourth month and the program was continued.

Results Related to the Third Research Question

The third research question asked whether the staff of the hospital were willing to learn and implement behavioral approaches to the management of disturbed elderly patients. It was noted in Chapter IV that no formal data collection related to attitude change or learning among the staff was possible but that subjective impressions would be reported. A useful structure within which to conceptualize the special care program as a learning experience for staff is provided by the Taxonomy of Educational Objectives for the Affective Domain (Krathwohl, Bloom, and Masia, 1964). In Table X a learning objective for staff in relation to the special care program is presented for each level in the taxonomy. A way of evaluating each objective using observable behavior of staff members is suggested.

It seems reasonable to consider the ability to recognize health potential and to develop or implement behavioral management plans as one which requires creative, problem-solving behavior and a willingness to see stimatized individuals apart from their labels or stereotypes. Although the measurement of attitudes is notoriously complex and studies have not yet established the precise relationship between

TABLE IX

DEGREE OF GROUP PARTICIPATION BY PATIENTS IN SPECIAL CARE UNIT OVER THE INITIAL FOUR MONTH PERIOD

Demonstrated Behavior Pattern	Type of Group Participation				
	* Reality Orientation (5 participants)	Remotivation Group (9 participants)	Conversation Group (4 participants)	Coffee Group (23 participants)	Occupational Therapy (23 participants)
Remained passive or unresponsive	0 out of 5	3 out of 9	Documentation not available	0 out of 26	2 out of 23 NOTE: quadriplegic patient could not participate - one patient's husband spent the afternoons with his wife, consequently she rarely participated
Indicated interest or attention	1 out of 5	2 out of 9	Documentation not available	5 out of 6	11 out of 23
Responded and/or participated	3	4 out of 9	Documentation not available	18 out of 26	10 out of 23

* One patient distracted the group with her constant noise and was removed from group. She did not demonstrate any meaningful behavior.

TABLE X

AFFECTIVE LEARNING BY STAFF OF SPECIAL CARE UNIT

LEVEL IN TAXONOMY	INSTRUCTIONAL OBJECTIVE FOR STAFF	BEHAVIORAL OUTCOME
I. Awareness: Given the appropriate opportunity, the staff member is conscious of something; takes it into account.	Staff member indicates awareness that potential for both health and illness exists within a patient and that nursing interventions may serve to reinforce either type of potential.	Staff member can list several types of patient behavior which may indicate health potential and which should be reinforced. Is able to identify behaviors which are dysfunctional and should not be reinforced.
2. Willingness to Receive: Staff member demonstrates a neutrality or suspended judgement toward the patient.	Staff member indicates a tolerance for ambiguous or apparently contradictory information about a patient or situation and pays attention to contradictory aspects of the information.	Staff member asks questions or contributes comments in conference situation which indicate awareness of the contradictory aspects of the patients behavior which may offer clues for the design of the treatment program
3. Controlled or Selected Attention: The staff member controls his or her attention so that a favored stimulus is selected and attended to despite competing and distracting stimuli.	Staff member identifies behavior or characteristics which, if reinforced, will enlarge the health potential and contribute to the behavioral improvement or rehabilitation of the patient.	Staff member contributes to discussion to identify patient behaviors to be reinforced.
4. Acquiescence in Responding: Staff member complies by making the response requested although he or she may not fully accept the reason for doing so.	Staff member helps to develop behavior management plan which identifies behaviors for positive reinforcement and behaviors which are to receive minimal or no attention	Staff member helps to implement behavioral management plan as specified.
5. Satisfaction in Response Staff member produces the behavior voluntarily, accompanied by emotional response of pleasure or satisfaction	Staff member indicates a sense of satisfaction in working with disturbed patients and in helping to develop and implement behavioral management plans.	Staff member indicates willingness and interest in continuing to work in the unit and in helping to design and implement plans. Contributes useful and increasingly original suggestions and is willing to try them in patient care.
6. Acceptance of a Value: Staff member accepts a proposition or doctrine, ie., believes it, but still in a tentative fashion.	Staff member demonstrates belief in the value of identifying target behaviors which indicate health potential. Becomes more skillful and consistent in doing so.	Staff member voluntarily and consistently identifies target behaviors indicating health potential and carries out the activities appropriate to her job description in developing and implementing individualized behavioral management plans.

attitudes and behavior, measures of attitude are considered an acceptable procedure for evaluation of learning in the affective domain (Krathwohl, 1964; Gagne, 1974; Popham, 1975). Cook and Sellitz (1964) state that inferences about attitude can be drawn from observation of ongoing behavior in a natural setting. To participate in the special care program, staff had to acquire certain knowledge, skills and attitudes. Even if the knowledge and skills are present, a certain predisposition to recognize and respond to a patient's health potential is necessary on the part of staff if behaviors are to be identified for reinforcement. Implementation of the special care program could thus be viewed as a learning experience for staff which involved the acquisition or changing of attitudes. The fact that a majority of staff willingly assisted in implementing the special care program and continued to maintain it after the study concluded suggests that significant affective learning took place.

Discussion of Results

An interesting question to emerge from this study has to do with a distinction which can be made between improvement in patient behavior (as defined by an increase or decrease in the frequency of target behaviors) and improved patient management. Patients whose behavior actually improved constituted 51.1% of the study group or 23 out of 45 patients. If the three mentally handicapped young adults in the special care program who improved, but remained in the unit are excluded, a total of 20 out of 45 patients or 44.4% showed improved behavior. It would be useful to be able to predict which patients would fall into this group.

Two types of program could then be made available. Patients with

potential for behavioral improvement could be selected for intensive one-to-one retraining. Patients who were unlikely to show behavioral improvement could be selected for a maintenance program. In the maintenance program, the treatment goal would be to maintain the present level of functioning and to prevent complications (see Figure 4). Staff in such a program would be encouraged to adapt their own behavior to the patient.

The following case example illustrates the maintenance program approach. Mrs. B. was admitted to the hospital from her home when she began to wander away frequently. She was considered unsuitable for nursing home placement because of the wandering and because she was diabetic. When she awoke each morning, she would roll her nightclothes and a few other articles into a bundle which she carried with her as she maintained a constant pacing up and down the corridor throughout the day. This brisk pacing, and her reluctance to stop for nourishment, made the occurrence of insulin reactions a likely possibility. The observation required for the diabetic condition ruled out transfer of Mrs. B. to a nursing home even if the wandering and pacing could have been decreased.

Staff in the special care program directed their efforts with Mrs. B. toward devising ways in which they could persuade her to stop briefly for a drink of juice or a bite to eat, thus reducing the likelihood of an insulin reaction. Discussions with her family revealed that Mrs. B. had been a refugee in eastern Europe during war time. The behavior she now demonstrated had once been functional. The nursing care of aged holocaust survivors is discussed by Hirschfeld

(1977) who points out that traumatic feelings and experiences may be revived with the stress of hospitalization. She notes that care givers must respect a patient's way of coping and try to meet various, sometimes strange needs without contributing to feelings of guilt in the patient. The goal of improved management for Mrs. B was achieved through nursing activities to prevent insulin reaction, and by preventing additional anxiety which might have resulted if she had been prevented from pacing.

The sort of accommodating management activities described above were required of the staff in the care of 17 or 37.7% of the special care patients who remained in the unit. Objective data are not available to suggest how staff behavior toward these patients changed. However, comments from staff and anecdotal material indicated that staff became more adept at protecting themselves and the patient from the consequences of unexpected dangerous behaviors. Staff expressed the belief that fewer incidents of what had formerly been termed aggression or violence occurred. If this were so, there are several possible explanations. There may have been less of a tendency for staff to label behavior in this fashion. Another possible explanation is that the increased physical and interpersonal activity available to patients mitigated stress and muscle tension, thus decreasing the likelihood of undifferentiated angry outbursts.

The special care program was continued following the year in which the study was carried out. About six months after the study ended, the three mentally handicapped young adult patients were discharged to newly established group homes in the community.

Recommendations for Replication of the Program

A review of the literature and the experience gained in this study lead to some logical recommendations for the use of behavioral techniques in treatment programs or research with disturbed elderly patients. Existing professional and ethical standards are in many cases applicable. However, the physical and emotional vulnerability of disturbed elderly patients, the small number of professionals trained in gerontology, and the small number of professionals employed in extended care centres dictate the need for more specific guidelines.

At present, regulatory mechanisms such as provincial nursing home regulations are inadequate and do not require that recognized standards of geriatric care (i.e. those contained in the Guidelines for ccreditation of ong erm are Institutions or in the National Institute of Aging Task Force Draft) be implemented. Few institutions devoted to geriatric care have access, even on a part-time basis, to the services of professional psychologists and the number of psychologists with expertise in gerontology is limited. For these reasons, the introduction of behavioral management programs for elderly institutionalized patients should be approached with caution if anything other than positive reinforcement is utilized. The expertise of a geriatrician must be combined with that of the professional psychologist in patient assessment, program design and evaluation. The following guidelines may seem rudimentary, but should be absolutely assured if a program utilizing behavioral techniques is to be instituted.

1. A satisfactory standard of medical and nursing treatment must be provided to the patient including:

- daily professional nursing assessment
- prompt diagnostic attention to symptoms
- regular visits by physician
- prompt and regular pain relief
- maintenance of a drug profile and regular review of response to medication
- referral for special needs to departments of Physiotherapy, Occupational Therapy, Recreation Therapy, Social Services, Dietary.

2. An informed consent from the patient or responsible person must be obtained if a behavioral management plan is to be implemented. Information provided to the consenting person must include:

   - the purpose of the plan
   - the goals (target behaviors)
   - description of procedures proposed to achieve goals.

3. The goals of a behavioral management plan must have as their first criterion, the safety, dignity and well being of the patient.

4. Goals and target behaviors should be reviewed and approved by an interdisciplinary team of professionals. Regular re-assessment of these goals should take place.

5. Except in cases of emergency, the decision to move a patient from one room to another must be made with due consideration of the effects of additional confusion and stress to the health of the patient.

6. Time out (defined as being moved from the presence of others or from a stimulating environment) must only be employed at the direction of a responsible professional. Someone must remain with the patient during any time out to provide supervision and support.

7. The use of restraints should be avoided wherever possible. Where they are necessary for physical safety, a medical order must be obtained for their use, and their purpose must be explained to patients and relatives. Restraints should not be applied as punishment.

8. Medication should be used for behavioral control as a last resort. When medication is used, the lowest possible doses to achieve desired therapeutic effects should be administered.

9. Patients should be addressed by the names preferred by them or their significant others.

10. Patients should be dressed as attractively and as fully as possible.

11. Choices and spontaneity by patients and their significant others should be encouraged. Patients' requests should receive prompt attention and preferences should be respected.

12. Significant others must be included in the plan of care. These may be relatives, friends, lovers, staff members, volunteers, or pets.

13. Anonymity of patients must be guaranteed in reports or publications.

14. A program for a patient or a group of patients should not be commenced unless there is a reasonable chance that it can be continued.

The fourteenth guideline merits special elaboration. Horton, (1973) has highlighted the problem of "using" the elderly patient in a teaching context. There has been some debate about the appropriateness of a

research design in which a return to pre-treatment conditions is used to provide validation of the effect of a particular intervention. However, the literature about the use of behavioral procedures with the elderly is curiously silent on the subject of the ongoing follow-up of patients being treated or studied. Too often one has the impression that a treatment is applied for a few weeks or months, as studies are carried out, and then withdrawn when researcher or students leave the setting. Inadequate staffing levels or lack of expertise and motivation among institutional staff will almost certainly dictate that any beneficial effects of a treatment program or the Hawthorne effect that may have accompanied it will dissipate, if not immediately, over a period of time. Deliberately adding any additional loss to the many others which have been experienced by the institutionalized elderly cannot be justified for humanitarian reasons no matter how laudable the scientific or educational motive.

Limitations of the Study

Exploratory studies have three purposes; to discover significant variables in the field situation, to discover relations among variables, and to lay the groundwork for later, more systematic and rigorous testing of hypotheses. Kerlinger (1973) considers a field study to be any scientific study, large or small, that systematically pursues relations and tests hypotheses that are ex post facto and that are done in life situations, including organizational or institutional settings. Weaknesses inherent in ex post facto research include the inability to manipulate independent variables, the lack of power to randomize, and the risk of improper interpretation. Field studies are credited with being "strong in realism, significance, strength of variables, theory orientation and heuristic quality" (Kerlinger, 1973, p.406).

Within the study setting, the selection of an experimental or quasi-experimental design was precluded for several reasons. Firstly, due to the small size of the unit and an anticipated indefinite length of stay in hospital by patients in the study, patient numbers would be small, even with a one year period of data collection. Random selection of subjects was not possible. Matching elderly patients in whom multiple pathology compounds the problems presented by individual differences would have been a formidable task under any circumstances. Without access to the expertise of specialists in geriatric medicine, it was considered a futile exercise. Finally, resources for sophisticated data collection and analysis were not available. In these circumstances, the choice of an exploratory and descriptive field study seemed most appropriate.

The special care program was designed and implemented to solve a practical problem of some urgency. Approximately $50,000.00 of additional funding had to be obtained to finance operating costs (i.e. salaries of 2 registered nurses and 3 therapy aides). The logistics of designing program materials, selecting, training and scheduling staff in the program, interpreting the program to hospital administration, physicians, other hospital patients and the significant others of special care patients, were complex administrative tasks in themselves. The operational aspects of implementing and maintaining the program precluded several types of data collection which had been considered.

One approach to data collection would have been to have a research associate do frequency counts of critical incidents from records in patients' charts before and during the study in an attempt to ascertain

whether they became less frequent during the study. Although subject to some limiting factors including the possibility of bias in recording once the study commenced, this method would have been a logical extension of the use of the critical incident methodology in selecting patients, and could have provided objective corroboration of staff members' preceptions of improvement. In fact, this methodology could still be applied retrospectively to existing patient records.

Another approach to data collection would have been to treat each patient in the special care unit as an "N-of-one" subject (Davis, 1979). Procedures for sampling and recording pre-treatment frequency of target behaviors for comparison with frequencies during the program could have been developed. A research associate could have been responsible for sampling and recording the frequency of target behaviors before and during the program. An advantage of this method would have been that staff behavior could also have been objectively sampled. However, a problem would have arisen in being able to claim effectiveness for the treatment program without employing a reversal design in which treatment was removed as a means of proving that it, and not some extraneous factor, was the cause of any behavioral change observed.

Multiple baseline designs might be used to solve this problem. Three types have been described by Hersen and Barlow (1976, pp. 226-253). In a multiple baseline design across behaviors, the same treatment variable is applied sequentially to separate, independent target behaviors in a single subject. In the multiple baseline design across subjects, the same treatment is applied in sequence across matched subjects presumably exposed to identical treatment conditions. This design would have been impossible to achieve with precision in the study

setting. A multiple baseline design across settings in which a treatment variable is applied sequentially to the same behavior across different settings in the same subject, might have been feasible. However, in view of the hypothesis that improvement in patient behavior would result following the introduction of the treatment program, a reversal design was considered questionable by the writer, since it would have exposed physically and emotionally fragile patients to additional losses and stress.

Behavioral improvement could also have been evaluated through the use of psychosocial assessment. While traditional psychosocial assessment was impractical in the setting without the availability of a professional psychologist, instruments developed for clinical use (Birkett and Boltuch, 1977; Gurland, 1979) or instruments for rating behavior (Gogan and Hambacker, 1977; Hersch, Kral and Palmer, 1978) could have been employed. Some use was made of Mental Status Questionnaire (M.S.Q.) scores and behavior ratings in selecting patients for, and evaluating their improvement in the reality orientation and remotivation groups, but interrater reliability in the use of the instruments had not been established. This problem could have been overcome if a research associate had administered the M.S.Q. or behavior rating prior to and at intervals during the program. While not relating directly to the hypothesis (i.e., predicted changes in specific target behaviors), such assessment could have formed the basis for an additional or more specific hypothesis in which the types and numbers of patients expected to improve might have been predicted.

Implications for Further Research

The exploratory nature of this study dictates that any conclusions

drawn from the results must be tentative. Since the auxiliary hospital in which the study was conducted was atypical, any generalizations must be drawn with caution. However, when it is considered that patients selected for the special care program were considered to have no potential for discharge and little or no potential for any sort of improvement, the outcomes of the program (improvement in over 50% of the patients; discharge of 31.1% of the patients from the hospital) are somewhat remarkable. Replication of the program with a more rigorous research design is indicated in a setting where the necessary professional expertise is available.

There are several other areas where further research is indicated. One is the study of optimum types and levels of stimulation for the disturbed elderly. At the present time, the institutionalized elderly are subjected to more-or-less random environmental stimuli dictated primarily by their level of physical mobility. The relationships between various types of sensory stimulation and agitation require exploration as do the relationship between disorientation and sensory input. The various treatment interventions described in the literature require more systematic application and evaluation with the disturbed elderly. Despite the scientific perils inherent in attempting to measure changes in attitude or personality characteristics, more formal study of the ways in which the attitudes of staff change as they utilize behavioral methods in patient care would be both interesting and worthwhile. Findings in this area could have practical application for the design of training programs and for staff selection.

One aspect of the study which should be extended to other auxiliary

hospitals and nursing homes in the province is the identification of the number and characteristics of patients who demonstrate behaviors which are harmful, threatening, or destructive. It is unlikely that the critical incident methodology could be employed province wide, however, since patient records in most auxiliary hospitals and nursing homes do not contain daily or even weekly nurses' notes. The results of this study suggest the need to identify, describe, and assess the needs of disturbed elderly patients in Alberta's extended care institutions. A sound basis would then be available from which to systematically redesign health services and retrain both professional and non-professional personnel in the knowledge, skills, and attitudes required to care for the behaviorally disturbed elderly in non-psychiatric institutional settings.

Summary

An exploratory and descriptive study of 45 behaviorally disturbed elderly patients was carried out in a 100 bed auxiliary hospital. Most of the patients were over 70 years of age and had been referred from acute care hospitals. Most patients had three or more medical conditions of physical origin and some degree of functional dependence or disability. Despite the fact that admission criteria for auxiliary hospitals in Alberta exclude patients whose behavior may be harmful, threatening, or destructive, patients in the study group demonstrated a range of such behavior including suicidal threats or attempts, striking out at other patients or staff, refusal of essential care or medications, and interference with the rights, privacy, or possessions of others.

The research problem was to ascertain whether there would be improvement in the behavior of disturbed elderly patients with the introduction of a treatment program. The program was characterized by increased numbers of purposeful interactions by staff with patients and the development of an individualized, goal-directed behavioral management plan for each patient. It was hypothesized that improvement in the behavior of patients would occur with the introduction of the program. The hypothesis was supported with 51.1% of patients showing improvement.

There were three additional research questions. The first question examined the outcomes of patient treatment as reflected by the numbers of transfers or discharges of patients in the study group from the program and the hospital. There was no expectation that any of the patients in the study group would be suitable for discharge. An unexpected and positive finding was that 31.1% of the study group were discharged: four patients to community settings and ten to nursing homes.

The second research question examined the appropriateness of the types of stimulation and group treatment methods utilized in the program. These methods were evaluated after the initial four months of the program and were found to be satisfactory. The program was then continued.

The third research question examined whether staff in the study setting would be willing to learn and apply behavioral approaches to the management of disturbed elderly patients. The staff acquired the knowledge and skill to implement the program and became more willing and adept in recognizing health potential in the behaviorally disturbed patients. The program was continued after the one year study period.

Replication of the study is recommended only if expert professional direction is available. Information to facilitate replication of the program is contained in Appendix B. Specific guidelines have been proposed to insure that ethical and professional standards are met if the program is replicated.

The study as carried out had certain limitations. The study setting was not typical of auxiliary hospitals in Alberta so any generalization must be made with caution. Because of the human and economic significance of the problem and the positive findings in the present study, further studies of disturbed elderly patients in extended care centres are indicated.

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APPENDIX A

THE PILOT STUDY

OUTLINE OF THE PILOT STUDY

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Introduction

The admission criteria for auxiliary hospitals in Alberta exclude individuals who have characteristics of serious mental or emotional problems and who might be harmful to themselves, harmful or threatening to others or destructive of property.

Increasing numbers of incidents of patient behavior which was indeed, harmful, threatening or destructive, were reported by staff of the Lethbridge Rehabilitation Hospital. Since the physical design, and number of staff in extended care centers do not take into account the possibility that the residents will require care and supervision for such behavior, there was a need to objectively demonstrate the presence of behaviorally disturbed patients in the hospital in order to substantiate appeals for additional resources. The critical incident methodology described by Flanagan (1954) and subsequently applied to a variety of situations was utilized for this purpose.

The critical incident technique provides a means of collecting and sorting anecdotal information in which facts predominate and opinion, generalizations, and personal judgement are reduced to a minimum. By means of this technique, experts are asked to identify conditions or behaviors which are critical (i.e. essential or important) to the safety, definition, or effectiveness of a particular endeavour. From large pools of incidents collected, generalizations which frequently come to be expressed as standards can be developed. Standards are developed through a study of both "positive" and "negative" critical incidents.

Purpose and Scope of the Study

The study was intended to identify patients who had demonstrated behaviors or conditions defined as critical. Patients were considered to have demonstrated critical behaviors if a written account of an incident involving behavior which was harmful, threatening or destructive to self or others was present in the nurses' notes. The charts of patients who had been discharged from hospital between January 1 and July 3, 1977 and the charts of all patients residing in the hospital during the month of July 1977 were reviewed.

Criteria Defining a Critical Incident

An incident was included in the study when one or more of the following behaviors or conditions were recorded:

1. withdrawal, psychosis, or suicidal behavior.
2. extremely agitated or constantly noisy.
3. outbursts of physical aggression toward other patients or staff.
4. confusion involving attempts to leave the hospital and/or interference with the rights, privacy or possessions of other patients.
5. refusal of necessary care or medications. (Care was considered necessary if its withdrawal would lead to deterioration in the condition of the patient).
6. a behavioral problem was the major reason why progress in rehabilitation was not made or why patient remained in hospital.
7. a behavioral assessment was indicated (i.e. to detect the probable causes of a critical behavior).
8. the patient's diagnosis was depression or terminal illness.

The Methodology

The critical incident methodology has been used in a variety of situations. Flanagan's (1954) discussion remains the most useful description of the methodology and provides the following definitions:

The Critical Incident Technique consists of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles. The critical incident technique outlines procedures for collecting observed incidents having special significance and meeting systematically defined criteria.

An Incident is any observable human activity that is sufficiently complete in itself to permit inference and predictions to be made about the person performing the act.

A Critical Incident must occur in a situation where the purpose or intent of the act seems fairly clear and/or where its consequences are sufficiently definite to leave little doubt concerning the effect.

Objectivity of Observations refers to the tendency for a number of independent observers to make the same report of an incident.

Procedures

Flanagan and Schmid (1959) identify the conditions which are set up to define a set of critical incidents and which are intended to obtain a representative objective set of factual events all judged by the observer to contribute to a single aim or conclusion. These are:

1. The definition of the situation observed.

This usually includes the delimitation of incidents submitted to those involving specific persons, locations, conditions and activities.

2. The relevance to the stated aim or conclusion. This represents a judgment or inference on the part of the observer. Because of the explicitness of the definitions and the established criteria as to what constitutes an incident which has sufficient relevance and effect that it should be admitted as one piece of evidence regarding the stated aim or conclusion, these judgements and inferences are usually found to be relatively objective.

3. The qualifications of the observers. In order to make the type of judgement and inferences mentioned above, it is essential that observers have appropriate experience and training.

When these conditions are met, a sample of the critical incidents thus defined can be treated like any other set of observed data to describe, to define, to compare, or to evaluate specific hypotheses.

Flanagan recommends that the aim of the activity be described precisely and that specific instructions be given to the observers. Since it is well known that extreme incidents can be more accurately identified than behavior which is more nearly average in character, a practical means of obtaining the specific data is to obtain records of critical incidents. On the whole, it is preferable that the behavior or results observed are evaluated, classified, and recorded while the facts are still fresh in the mind of the observer.

However, the technique can also be used for observations previously made which are reported from memory. Evidence regarding the accuracy of reporting is usually contained in the incidents themselves. If full and complete details are given it can be assumed that the information is accurate, whereas vague reports suggest that the incident is not well remembered and that some of the data may be incorrect.

Patient Observational Record Forms were devised by Flanagan and Schmid for use of the critical incident approach to the study of psychopathology (1959). Two exploratory studies demonstrated that graduate nurses, student nurses and nursing assistants could produce relatively objective reports of patient behavior.

The Observers

The observers in this study were all professional members of the health care team who recorded comments on the patient record. Comments by attending physicians might be found on the admission form, the medical history, consultation reports or medical progress notes. Physiotherapists, the occupational therapist, recreation therapist or social worker occasionally charted on an Interdisciplinary Progress Referral and Conference Note. However, the majority of narrative comments were to be found in the nurses' notes.

Nurses have the opportunity to observe patients over long periods of time and are therefore in an excellent position to identify unusual events or extremes of behavior. The patient record is a legal document in which the patient's activities and behavior are to be described in factual terms. The standard provincial report for

reporting unusual incidents (i.e. those involving accident, injury or damaging property) is most frequently completed by registered nurses. Charting in extended care institutions tends to be minimal. This is partly because of time constraints and partly because there is traditionally little medical involvement or interest in the elderly or chronically ill patient and thus little incentive to write elaborate notes for the benefit of the doctor. Furthermore, as in most auxiliary hospitals the ratio of professional to non-professional staff and the total ratio of staff to care for a population of patients who are severely disturbed and frequently dependent is small. If a patient exhibited a disturbance of behavior, particularly if this occurred on the evening or night shift, a majority of available staff would be involved in subduing the patient. These factors would tend to result in under-reporting or incomplete reporting.

Since the study was done retrospectively, observers were not aware that a review of their charting would take place. It can be safely assumed that no extraordinary care was taken in recording the observations which were examined in the course of the study. However a bias, expressed as a tendency to report incidents involving patients who were perceived as dangerous, was assumed.

The Reconstructed Incidents

A nurse who was knowledgeable and highly skilled in the physical, technical and psychosocial aspects of geriatric and rehabilitation nursing carried out the review of all charts examined in the study. A structured critical incident reporting form was

developed. Incidents were not included in the study if there was insufficient information charted to permit their reconstruction on a factual basis.

The objective was to ascertain the number of patients among those whose charts were reviewed who had demonstrated one or more critical incidents during their hospital stay. In some cases, a single incident was reconstructed. In other cases, several incidents about the same patient were summarized on the one form. The number of incidents, either for one patient or the patients as a group, was not of particular interest except as detailed study of several incidents related to one patient might make it possible to identify considerations for improving safety or for program development. Some reconstructed incidents are presented at the end of this appendix.

The primary medical diagnosis and any other medical conditions identified by the referring physician were reviewed to identify whether the behavioral disturbance of the patient had been formally identified prior to admission. The length of stay of each patient was recorded. The study took sixty-six hours over a one month period to complete.

Classification of Incidents

Two major categories were used to summarize the reconstructed incidents. The first classification included behavior that presented a danger to self or others and was usually accompanied by confusion or agitation. The second category included patients whose diagnosis or behavior indicated unusual emotional needs. This category included

all patients diagnosed as having depression or a terminal illness. The categories were not exclusive. A person with depression might have attempted suicide or a terminally ill patient might have struck out at someone because of organic brain damage associated with the terminal illness or because of pain or anger. Patients in either category might demonstrate behavior dangerous to self or others.

It was possible to reconstruct one or more incidents that matched the criteria for a total of 47 patients. This number was 31.1% of the total number of patients whose charts were reviewed. Table A-1 shows that critical incidents were recorded for a total of 13 discharged patients. Nine patients had unusual emotional needs and four had been confused or agitated. Thirteen in-patients had unusual emotional needs and 21 were confused or agitated, making a total of 34 in-patients for whom a critical incident had been recorded. Ten discharged patients and 16 in-patients had medical diagnoses which did not indicate that a disturbance of behavior was present or to be expected. The average length of stay of the in-patients was much greater than that of the discharged patients. Greater detail is provided in Tables A-2 and A-3. Table A-3 indicated that 25 of the 47 patients for whom a critical incident could be reconstructed were confused or agitated. Reasons for identifying them as dangerous to self or others are given.

Table A-2 presents similiar data for the 22 patients who were classified as having unusual emotional needs. The judgement that a patient was dangerous to self was made if the reconstructed incident involved a suicide attempt (Criterion 1), a level of agitation that could lead to exhaustion (Criterion 2), confusion

TABLE A-I

CHARACTERISTICS OF PATIENTS EXHIBITING SYMPTOMS OF UNUSUAL EMOTIONAL NEEDS OR BEHAVIOR DANGEROUS TO SELF OR OTHERS

Location of Patients	Characteristic of Patients			
	Unusual Emotional Needs	Dangerous to Self or to Others due to Confusion or Agitation	Problem Indicated in Medical Diagnosis	Average Length of Stay
Discharged Patients	9	4	10	29.2 days
In-Patients	13	21	16	450.32 days Range 2 - 2,964 days
Total - 47	22	25	26 or	
Percent of Total	46.8%	53.2%	55.3%	

involving attempts to leave the hospital (Criterion 4) or refusal of necessary care or medications (Criterion 5). Patients were classified as dangerous to others if they had struck out at other patients or staff (Criterion 3)or if they interfered with the rights, privacy or possessions of other patients (Criterion 4). Several illustrative incidents are presented at the end of this appendix.

The numbers of patients who were dangerous or threatening to others (9) who were dangerous to themselves (31), who were depressed (10) and terminally ill (5) were high when considered as a percentage of a total of 151 patients whose charts were reviewed.

TABLE A-2

PATIENTS WITH UNUSUAL EMOTIONAL NEEDS

PATIENT	SYMPTOMS	DANGEROUS TO SELF	REASON	DANGEROUS TO OTHERS	REASON
1	Withdrawn	X	Falls		
2	Paranoid delusion				
3	Depressed, occasional hallucinations	X	History of suicidal rumination		
4	Withdrawn	X	Doesn't eat		
5	Withdraws into catatonic state at times	X	Refuses to eat or move		
6	Depressed				
7	Depressed				
8	Compulsive, unpredictable. On behavior modification plan			X	Picks on helpless patients
9	Manic-depressive cycles	X	Compulsive smoking. Tried to run away	X	Pushed passive patient in wheelchair around causing her to get disoriented
10	Withdrawn and depressed	X	Refused to eat at times		
11	Occasional hallucinations				
12	Anxiety attacks				
13	Depression				
14	Depression				
15	Depression	X	Mentioned suicide		
16	Terminally ill				
17	Depression				
18	Terminally ill				
19	Depression				
20	Terminally Ill				
21	Terminally ill				
22	Terminally ill				

TABLE A-3

PATIENTS EXHIBITING DISTURBANCES OF BEHAVIOR
DUE TO CONFUSION AND AGITATION

PATIENT	BEHAVIOR	DANGEROUS TO SELF	REASON	DANGEROUS TO OTHERS	REASON
23	Agitated and noisy	X	Pulled out catheter		
24	Confused	X	Wanders	X	Strikes out
25	Restless and noisy	X	Has fallen several times		
26	Confused	X	Totally confused	X	Strikes out
27	Periods of Confusion	X	Frequent falls		
28	Disoriented	X	Wheels into walls etc.		
29	Confused and belligerent	X	Confused and uncooperative	X	Strikes out
30	Confused at times	X	Poor balance		
31	Confused	X	Wanders and resistant to nursing care	X	Belligerent and hostile at times
32	Confused and Noisy	X	Semi-comatose		
33	Confused, agitated	X	Resists nursing care	X	Strikes out
34	Totally disoriented	X	Hallucinates, wanders and has fallen		Strikes out
35	Totally disoriented	X	Wandered and fell breaking his hip		
36	Agitated, Belligerent	X	Refused to eat or take medications	X	Strikes out
37	Unable to communicate, noisy	X	Tried to escape, refused to take medications		
38	Confused and noisy	X	Fell out of bed		
39	Confused and agitated	X	Attempted to get out of bed when on strict bed rest. Pulled out catheter		
40	Confused and noisy				
41	Confused and noisy	X	Fell out of bed		
42	Confused and very agitated	X	Wanders	X	Strikes out
43	Confused and agitated	X	Several falls, wanders		
44	Intoxication	X	Stuporous at these times		
45	Confused, agitated and noisy	X	Crawled over side-rails		
46	Confused, unstable affect and becomes irritable, alcoholic with no insight	X	Fell and broke leg Continues to drink when out of hospital		
47	Confused and occasionally agitated	X	Poor Balance		

Large numbers of these patients were physically dependent, frail and in the seventh or eighth decade of life. The small numbers of total staff, the meagre ratio of professional nurses to patients, and infrequent patient visits by the physician can partially account for a lack of consistent or effective management of these patients. The "dumping" phenomenon described in the literature (Parnell, 1968; Simmon, 1973; Ward, 1977) is suggested by the fact that almost all patients were transferred from an acute care hospital and slightly less than half had behavioral symptoms identified in the transferring diagnosis.

Summary and Conclusion

The purpose of the study was to ascertain the numbers and characteristics of patients with disturbed behavior or unusual emotional needs in a 100 bed auxiliary hospital. The charts of 151 patients resident in or recently discharged from the hospital were reviewed. The critical incident methodology (Flanagan, 1954) was used to reconstruct incidents of patient behavior which was dangerous to self or others or which indicated unusual emotional needs from information contained in the medical record.

It was possible to reconstruct critical incidents for 47 or 31.1% of the patients whose charts were reviewed. Of these 47 patients, 22 were categorized as having unusual emotional needs, and 25 were categorized as having demonstrated behavior that was dangerous to self or others. A behavioral problem was indicated in the medical diagnosis of only 26 or 55.3% of these patients.

The results of this preliminary study were reviewed with professional nursing staff, executive members of the medical staff and the hospital

administration. Conclusions drawn from this study were as follows:

1. A significant number of patients currently residing in Lethbridge Rehabilitation Hospital had demonstrated incidents of behavior defined as dangerous to themselves or others. A majority of these patients demonstrated confusion or agitation which might be a result of, or present with, organic brain disease. A smaller number had diagnosed mental illness.

2. The results of the preliminary study are consistent with impressions gained from the literature. Cases described by Snyder and Harris (1976) bear a marked resemblance to some of the critical incidents in the study and highlight significant and specific problems of diagnosis and management.

3. Although improvement in medical condition or discharge from the hospital might be unlikely, an increased margin of safety for patients and staff in the hospital was a reasonable expectation if the medical and nursing management of the identified patients could be improved.

Results obtained from the preliminary study led to the development of a proposal for a special care program and the exploration of avenues for program funding.

ILLUSTRATIVE DESCRIPTIONS OF CRITICAL INCIDENTS

INCIDENT ONE

CRITICAL INCIDENT REPORT OF UNUSUAL OR DANGEROUS PATIENT BEHAVIOR

Instructions:

Report factual material only in Section 1 through 4. Give your opinion and recommendations about the individual in Section 5.

1. Date Chart reviewed Aug 11/77 Time:_____ Location_____

2. Events Leading Up To Incident: (include safety precautions taken, behavior of staff, other patients, etc.)
Admitted Oct. 3, 1975. Cerebellar Hemorrhage with left hemiparesis and depression. Poor appetite, refused to eat and vomited frequently when fed. Lethargic and withdrawn - speech almost incoherent. Weak and unable to do own ADL or ambulate unassisted. Incontinent of urine and bowels.

3. Description of Incident:
During this admission patient was on Gravol 50 mgm a.c. meals; Protriptyline 20 mgm, 18h; Tofranil, 25 mgm tid; Haldol 1 mgm, tid. On June 3, 1976 she was transferred to Lethbridge Municipal Hospital because of a possible acute ileus.

4. Resolution of Incident: (include any additional safety precautions taken, interventions by Doctor, Police, additional staff - use of medication, etc.) While at L.M.H. all her medications were discontinued. She returned to L.R.H. on June 11, 1976. Her mental status seemed the same on readmission but it was charted that she was speaking clearly and ordering staff members around. On June 15, 1976 she untied her wheelchair restraint and fell fracturing her left hip. She was again transferred to L.M.H. and had a hip replacement done.

5. Nursing Assessment and Recommendations of Incident: (include how incident might have been prevented.)
This patient was readmitted July 2, following her hip surgery. She was alert, had a good appetite. She was dependent on staff members for most of her personal care and required encouragement and teaching to achieve a level of self care. She was discharged home November 12, 1976.
It was not clear why this lady was put on so many psychotropic medications. It would seem that the cause of her depression and disorientation was the use of these drugs.

Patient's Name: _____ Hospital #_____ Nurse Reporting Incident____

INCIDENT TWO

CRITICAL INCIDENT REPORT OF UNUSUAL OR DANGEROUS PATIENT BEHAVIOR

Instructions:

Report factual material only in Section 1 through 4. Give your opinion and recommendations about the individual in Section 5

1. Date Chart reviewed Aug 8/77 Time: _____ Location _____
2. Events Leading Up to Incident: (include safety precautions taken, behavior of staff, other patients, etc.)
   Patient admitted while husband was in Lethbridge Municipal Hospital with fractured hip.
3. Description of Incident: Patient admitted April 6th with diagnosis of Cerebral Artheriosclerosis. She was not aware of time or place and exhibited some confusion as to events and people. Her attention span was short and her judgement poor. She was placed on Haldol 0.5 mgm bid. April 20, 1977 - found dressed in coat walking to elevator (planning on "walking to Coutts"). April 21st, 1977, Haldol increased to 0.5 mgm tid. April 23/77 patient found outside, heading toward 9th avenue. April 28th, unsteady on feet and needed help to walk. April 29, 0200 voided on floor and fell on floor, 0900 patient found eating her blouse and said it was her breakfast. April 29th call placed to doctor and Haldol discontinued.
4. Resolution of Incident: (include any additional safety precautions taken, interventions by Doctor, Police, additional staff - use of medication, etc.)
   May 13, 1977 - Bellergol Space Tabs 1 q12h ordered
   May 19, 1977 - Bellergol discontinued and Stelazine 1 mgm bid ordered
   April 21, 1977 - Doctor visited - no progress report
5. Nursing Assessment and Recommendations of Incident: (include how incident might have been prevented)
   It would appear that this patient would have benefited from a different regime of tranquilizers. Perhaps some reality orientation in a group situation might have been helped as well. She was seen only once by her doctor in 2½ months and probably required closer medical supervision.

Patient's Name:_____ Hospital #_____ Nurse Reporting Incident_____

INCIDENT THREE

CRITICAL INCIDENT REPORT OF UNUSUAL OR DANGEROUS PATIENT BEHAVIOR

Instructions:

Report factual material only in Section 1 through 4. Give your opinion and recommendations about the individual in Section 5.

1. Date Chart reviewed Aug 15/77 Time: _____ Location_____
2. Events Leading Up To Incident: (include safety precautions taken, behavior of staff, other patients, etc.)

   Dec. 6, 1974 admitted with senile dementia probably due to arterio-sclerosis. Disoriented as to time and place. Had reverted back to native German tongue. Pleasant and smiling - no violent behavior. Wandered up and down corridors and kept trying to go home. Dr. asked for.
3. Description of Incident:

   December 7, 1974 - Dr. saw patient and ordered Haldol 1 mgm tid and Promazine 100 mgm at h.s. (2030)
4. Resolution of Incident:(include any additional safety precautions taken, interventions by Doctor, Police, additional staff - use of medication, etc.)

   Patient became very drowsy. By December 14, 1976 he was no longer able to walk. Developed mild gout - sores in mouth and open areas on heels. Haldol discontinued January 13, 1975. February 6, 1975 able to walk with two assistants. February 26th, able to walk with walker.
5. Nursing Assessment and Recommendations of Incident: (include how incident might have been prevented)

   Seems to have been over medicated especially with Haldol. The patient really was not much of a problem and would probably have settled within a week of admission without the medication. He was wandering but made no serious attempt to leave the building. It would have been better if the doctor would have seen him about one week after admission instead of one day.

Patient's Name:_____ Hospital #_____Nurse Reporting Incident_____

INCIDENT FOUR

CRITICAL INCIDENT REPORT OF UNUSUAL OR DANGEROUS PATIENT BEHAVIOR

Instructions:

Report factual material only in Section 1 through 4. Give your opinion and recommendations about the individual in Section 5.

1. Date Chart reviewed Aug 22/77 Time: _____ Location: _____

2. Events Leading Up To Incident: (include safety precautions taken, behavior of staff, other patients, etc.)

   Admitted June 9, 1977. Right sided C.V.A. with severe receptive and expressive aphasia. Self care level. No friends or family who are willing to be responsible for his care or else he could be discharged.

3. Description of Incident:

   July 2nd-0800 Patient was seen outside on street and attempts to bring him back into hospital met with violent objection. He was clinging to branches of an evergreen and had to be forced into a wheelchair.

   July 3rd-2320 Patient discovered to be missing. Police notified and unable to find him. Police returned patient to hospital 0815, July 4.

   July 31 - Refused to take Valium with breakfast. Valium 5 mgm IM @ 1100 with assistance of four people. 1300 - tried to get out of hospital via back door - swearing and upset with staff. 1505 hanging over railing of sundeck.

4. Resolution of Incident: (include any additional safety precautions taken, interventions by Doctor, Policy, additional staff - use of medication, etc.)

   July 8th Moved from 205 to 201 closer observation

   July 4th Order to transfer patient to emergency at discretion of nurse obtained from doctor. Put on various combinations of Largactil and Haldol.

   July 31 Haldol 3 mgm I.M. ordered, repeat in 2 hours if necessary then q6h prn. Restrain in geriatric chair all night if necessary.

5. Nursing Assessment and Recommendations of Incident: (include how incident might have prevented).

   Probably the only thing that would help this man would be finding him suitable placement outside the hospital environment. An enclosed area outside might satisfy him partially if he must remain here. He certainly must be closely watched and medicated at all times.

Patient's Name: _____ Hospital # _____ Nurse Reporting Incident _____

INCIDENT FIVE

CRITICAL INCIDENT REPORT OF UNUSUAL OF DANGEROUS PATIENT BEHAVIOR

Instructions:

Report factual material only in Section 1 through 4. Give your opinion and recommendations about the individual in Section 5.

1. Date Chart reviewed Aug 25/77 Time _____ Location _____

2. Events Leading Up To Incident: (include safety precautions taken, behavior of staff, other patients, etc.)

   Admitted from S.L.N.H. because of aggression and striking out at others. Doctor wanted sedation withheld if at all possible. Staff were watching her closely.

3. Description of Incident:

   June 4-77, 0900 Slapped another patient on face. Wandered all evening. Into C.R.S. and found a pair of scissors which she would not give to staff but later left them at nursing station. Voiding on floor.

   July 24-77 1600 Patient in kitchen tampering with coffee urn. She spilled hot coffee on her right hand. Fingers and hand reddened.

4. Resolution of Incident: (include any additional safety precautions taken, interventions by Doctor, Police, additional staff - use of medication, etc.)

   June 2, 1977 Put on Haldol 2.5 mgm I.M. stat and continue on oral dose 1.5 mgm tid.

   June 10, 1977 Reduce Haldol slowly to 0.5 mgm daily.

   June 27, 1977 Discontinue Haldol. Give Largactil 10 mgm at 09 and 1300 and Largactil 25-50 mgm in evening.

5. Nursing Assessment and Recommendations of Incident: (include how incident might have been prevented)

   Still restless and wanders but less aggressive.

   Should be isolated from "normal" patients especially at night.

Patient's Name: _____ Hospital # _____ Nurse Reporting Incident ____

INCIDENT SIX

CRITICAL INCIDENT REPORT OF UNUSUAL OR DANGEROUS PATIENT BEHAVIOR

Instructions:

Report factual material only in Section 1 through 4. Give your opinion and recommendations about the individual in Section 5.

1. Date: Chart reviewed Sept. 1/77 Time_____Location; _____

2. Events Leading Up to Incident: (include safety precautions taken, of staff, other patients, etc).

April 17-77 Patient appeared to be unable to see. Feeling his way around, bumping into walls. When asked by staff member, said he could not see her.

3. Description of Incident:

April 25 - Daughter in to visit and patient would not allow to cut nails.

2250 Wet and while staff were changing him, he scratched both girls extensively on arms.

April 26 0600 Scratched staff members while bed changed and also tried to bite.

0700-1500 Violent and scratched and hit when touched. Would not eat dinner.

4. Resolution of Incident: (include any additional safety precautions taken, interventions by Doctor, Police, additional staff - use of medication, etc.)

April 26 - 77

1300 Doctor notified and orders received for Largactil 50 mgm (P.O) or I.M.) prn.

5. Nursing Assessment and Recommendations of Incident: (include how incident might have been prevented)

This patient was always moody and unpredictable since admission. He is difficult to communicate with because he speaks very little English. His violence seems to, at least partially, stem from poor vision. It is essential that staff members realize this and approach him calmly and carefully.

Patient's name: _____ Hospital # ____Nurse Reporting Incident _____

APPENDIX B

MATERIALS DEVELOPED FOR SPECIAL CARE PROGRAM

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APPENDIX B-1

PHILISOPHY OF SPECIAL CARE PROGRAM

The special care program has been established within the Lethbridge Rehabilitation Hospital in recognition of the fact that in a significant number of the patient population, medical conditions are complicated by behavioral factors which may be responsible for:

a) the initial admission or transfer of the patient to this hospital; and/or

b) failure of the patient to progress in physical, emotional or social aspects of rehabilitation resulting in his or her continued residence in the hospital.

Once such a patient has been accepted for admission, the hospital must undertake to provide the patient with a level of care which can reasonably be expected to ensure his or her physical safety, human rights, and those of patients and staff in the same environment. Furthermore, each patient, regardless of social acceptability or prognosis, is deserving of a level of care in which sufficient assessment, treatment, and support are available to permit recognition and achievement of the existing rehabilitation potential.

Due to the variability of patients' behavior and medical conditions, the basis of safe and therapeutic care is skilled observation, judgement, planning and intervention by professional nurses. The professional nurse must assume responsibility for development of detailed and consistent plans for the management of behaviors which interfere with the achievement of rehabilitation goals or which endanger the safety of the patient and those who share his/her environment. The nurse

Philosophy of Special Care Program - Continued

must also provide instruction and support to auxiliary staff, volunteers and family members who relate to the patient, and co-ordinate the efforts of the rehabilitation team on his/her behalf. The numbers of professional nurses and auxiliary staff required must be determined by an assessment of the patient's behavioral condition and nursing needs.

Specialized knowledge and skills are required of staff to carry out the special care program. These must be provided through supplementary inservice education. Emotional and administrative support must be available to the staff, volunteers and family members to assist them in managing the stresses that accompany frequent or continuous contact with persons whose behavior is antisocial. The Special Care Program is in no way intended to be an extension of the psychiatric services provided by the Lethbridge Municipal Hospital or the provincial government. Patients with acute psychiatric conditions or behavior which poses an immediate danger or which continues to be harmful, threatening or destructive after a period of assessment, will be transferred, if necessary, as an emergency admission to a more appropriate facility.

APPENDIX B-2

OBJECTIVES OF SPECIAL CARE PROGRAM

1. Thorough assessment of the physical, emotional and social status of the patient including review of the community and family support available.
2. Determination of realistic and appropriate treatment goals by a multidisciplinary team.
3. Implementation of a patient care plan including specific directions for behavioral management which can be carried out by all staff members under the supervision of a professional nurse.
4. Stabilization or improvement in the patient's behavioral status so that he or she can function in an appropriate alternate setting which could be one of the following:
   - return home with support services
   - transfer to community care if available (i.e. approved home, group home)
   - transfer to nursing home
   - transfer from special care unit to another location in the Rehabilitation Hospital
5. Transfer of patients whose behavior does not stablize to a more appropriate facility which could be one of the following:
   - medical or psychiatric unit of acute care hospital
   - long term provincial mental health institution
   - acute psychiatric care
6. Collection of data to document the incidence, type of severity of behavioral problems in patients referred to Lethbridge Rehabilitation Hospital; their source of referral, length of stay, the course and outcome of treatment, and the extent of responsibility assumed by relatives, friends, volunteers and other community agencies.
7. Collection of information which indicates requirements for:
   - safe ratio of staff to patients
   - skills needed by personnel
   - design, modification and appropriate use of physical facilities
   - what constitutes effective program content and treatment modalities
   - essential "process" factors such as inservice education, interprofessional teamwork, family involvement, etc.

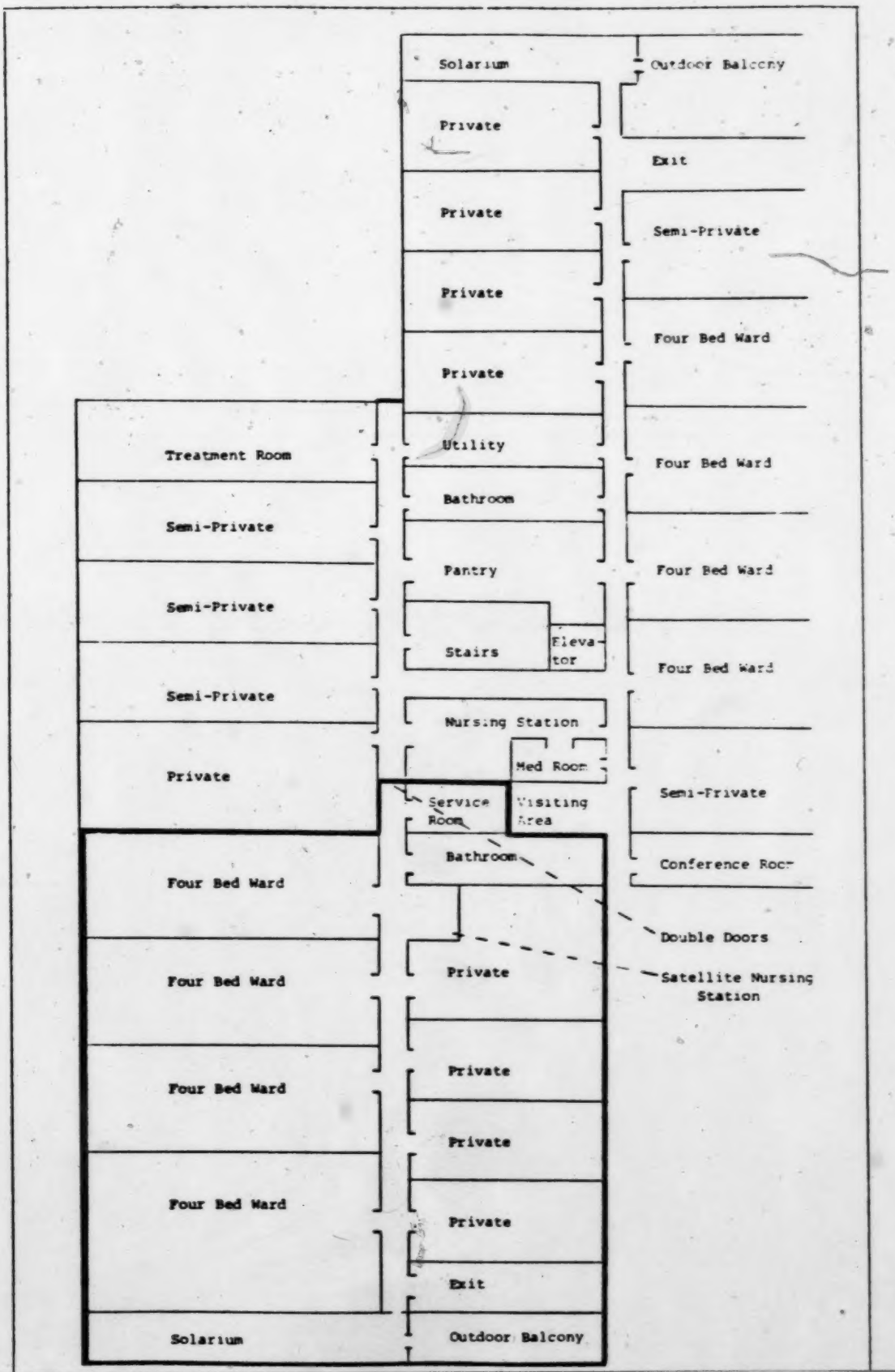
APPENDIX B-3
PHYSICAL CHARACTERISTICS OF THE SPECIAL CARE UNIT

It was decided to carry out the special care program in a designated area of the hospital. The physical location of the program will be referred to hereafter as the special care unit. The unit contained four private rooms, and four, four bed wards (Figure B-3). It was separated from the rest of the third floor by swinging double fire doors. A large solarium with an adjoining outdoor deck was located at the south west end of the corridor, serving as a common area for refreshments, group activities, television viewing, family visiting and meals. Minor environmental modifications included installation of full length mirrors in each patient room and the addition of colorful posters in the solarium. A metal cupboard was removed from an alcove about half-way down the length of the hall and a desk and chairs installed to create a "satellite" nursing station. This was to encourage staff to remain in the area where they would be able to observe and hear patients while charting etc. Supplies and equipment kept in this area included blood pressure apparatus, incontinence pads and devices for patient restraint in emergency situations.

Several inexpensive but important physical modifications were eventually made to improve the safety of the patient care environment. Dutch doors were installed at the nursing station, medication rooms, kitchen and utility rooms making it possible for staff to see and hear patients from these areas, and preventing patients from having access to harmful materials. An outdoor area was fenced so that wandering patients could safely spend time outdoors in good weather.

FIGURE B-3

FLOOR PLAN SHOWING SPECIAL CARE UNIT



APPENDIX B-4
STAFFING OF THE SPECIAL CARE UNIT

Patients in the special care unit were frail and highly dependent, in addition to their behavioral symptoms. An enriched staffing pattern for this area was therefore considered essential.

Funds for additional staff were obtained from two sources. A Canada Works Grant in the amount of $28,500 over a one year period was used to fund three therapy aide positions. The Hospital Board approved funding for two registered nurse positions for a six month period. Following an evaluation, these positions were continued.

Changes in the staffing pattern can best be appreciated by comparing the former allocation of staff for the 50 beds on the third floor with the pattern instituted when the special care unit opened. Major differences were as follows and are summarized in Figure B-4.

Registered Nurses

Two registered nurses were selected and assigned to the special care unit on the day shift. They were selected to work in the program on the basis of their interest, their ability to plan care, and their awareness of psychosocial as well as physical dimensions of care. A listing of specialized skills required by nurses for their role in the special care unit is presented in Figure B-4-A.

Nurses became involved in the direct observation and care of patients. One effect of this was that patients benefited from the direct observation and interventions of the registered nurses The presence of the nurses contributed to the status and morale of aides working with the disturbed patients. Other major functions of the nurses included detailed planning

FIGURE B-4

STAFFING PATTERN BEFORE AND AFTER ESTABLISHMENT OF SPECIAL CARE UNIT

Staffing Pattern for 50 Beds Before Establishment of Special Care Unit				Staffing Pattern After Establishment of Special Care Unit					
				20 Bed Special Care Unit			Remaining 30 Beds of 50 Bed Ward		
Number of Staff by Tour of Duty				Number of Staff by Tour of Duty			Number of Staff by Tour of Duty		
7 - 3	3 - 11	11 - 7	Staff Category	7 - 3	3 - 11	11 - 7	7 - 3	3 - 11	11 - 7
3	1	1	Registered Nurse	2	1	.5	1	1	.5
6.5	4	1	Nursing Aides and Attendants	(T) (R) (O) 3	(T) 3	1	3.5	2	1
1			Nursing Orderlies	Shared			1		

Prior to development of the Special Care Program, selected patients received individual Physiotherapy, Occupational Therapy and Recreation Therapy. This rarely included patients who were selected for the special care unit, although a few of these patients left the unit to participate in Reality Orientation or Remotivation Groups or other Recreational Programs.

(T) Includes therapy aide who carried out both nursing and program functions with individual patients.

(R) Includes ½ hour a.m. and p.m. Refreshment period supervised by recreation therapy aide

Includes reality orientation groups and remotivation groups supervised by Recreation therapy aide

(O) Includes some work with individual patients by occupational therapy aide mornings, Monday to Friday

of care, initiating contact with physicians, particularly in regard to scheduling or discontinuing medications, and initiating diagnostic measures. The nurses were responsible for conducting patient care conferences, supervising and assigning the work of the aides, co-ordinating care with other hospital departments, and providing instruction and support to families.

Experience had shown that accidents and incidents involving disturbed patients frequently occurred on the evening shift when a minimum of personnel were available. Families frequently visited during the early evening hours. Patients who had been placed on the evening shift frequently wakened and became disruptive at night if careful adherence to a planned schedule for drug administration within the boundaries of flexible medical orders was not consistently followed. The presence of a registered nurse to direct the care of these patients on the evening shift was thus considered essential.

Registered Nursing Aides, Nursing Attendants and Therapy Aides

No new positions for registered nursing aides and nursing attendants were added. External funding for three para professional positions was obtained. These positions were not included in the collective agreement and therefore required a separate job description and title. The job description of "therapy aides" is presented as Figure B-4-B. It was considered necessary for the therapy aide to be able to provide personal care to patients, both to ensure their acceptance by other staff and because many of the behavioral goals would involve activities of daily living.

Two of the three therapy aides employed for the project were oriented to nursing functions and routines. A female therapy aide

(with B.A.) worked days Monday to Thursday with the additional hours being distributed in evenings or on weekends to accommodate planned activities. When no special activities were scheduled, she worked Monday to Friday. The male therapy aide (in final year of B.A. program) attended University in the mornings and worked from 1300-2100 hours Monday to Friday with occasional weekend assignments. With the addition of these two positions in the day and evening shift, a regular nursing attendant position was reallocated to the night shift. The individual scheduled to work nights in the special care unit was located at the "satellite" nursing station midway down the hall in the area. From this position, she made half hourly rounds in the area. She was able to hear if patients were getting out of bed, and go to their assistance. This measure was considered necessary because of the large numbers of falls, sometimes resulting in injury, which had been found to occur among patients in the special care unit.

Registered nursing aides and nursing attendants were primarily involved in assisting patients with activities of daily living, (i.e. bathing, dressing, eating and toileting). Their patient care assignments were developed and interpreted to them by the registered nurse so that they would knowledgeably assist in implementing the care plans. They were selected to work in the special care unit on the basis of interest, sense of humour and a demonstrated ability to deal kindly with the patients.

Registered Nursing Orderlies

Only two registered nursing orderlies were on the staff of the hospital. They worked permanent day shift and were usually given

patient assignments of several male patients requiring assistance with genito-urinary functions. The orderlies continued to provide occasional service to special care patients as they had prior to commencement of the program.

Occupational Therapy Aide

The third therapy aide was assigned to the Occupational Therapy Department. Following assessment of patients' abilities in activities of daily living by the therapist, the aide worked with selected indivudal patients to attempt to reinstate lost skills. This work time was usually conducted in the mornings and at the noon meal. Therapeutic group activities lasting about two hours were planned and conducted by the aide three afternoons a week.

Recreation Therapy Aide

Prior to inauguration of the special care program, aides from the Recreation Department had conducted reality orientation groups three mornings a week and remotivation groups two afternoons a week for selected patients, some of whom were among those selected for the special care unit. This practice continued.

The Recreation Department supervised morning and afternoon "coffee" sessions for all hospital patients in the lounge on the main floor prior to the introduction of the special care program. A number of the disturbed patients had not been involved in this because they required one-to-one supervision which was not available. To meet their needs a morning "coffee" was instituted and staffed in the special care unit solarium by the Recreation Department.

Other Professional Team Members

Although not included in the staffing pattern of the special care unit, the professional heads of clinical departments of Physiotherapy, Occupational and Recreation Therapy, and Social Services provided assessment and consultation services to the program. Social Services were particularly important for this patient population. Each patient remained under the care of his or her own physician. Physicians were obligated by hospital policy to visit at least once a month. Most patients were visited every 1 - 2 weeks by their doctors.

Volunteers

The hospital had an active volunteer program when the special care unit was established. Volunteers had been encouraged to form one-to-one relationships with one or two patients and some patients in the special care unit did have volunteers who had taken a particular interest in them. Volunteers also assisted with some of the group activities and recreational events. They were provided with information about the philosophy, objectives and methods of the program so that they could knowledgeably participate in the treatment plan. They required some support in order to participate. The involvement of volunteers was perceived as helpful by staff and by patients' families.

FIGURE B-4-A

SKILLS OF R.N. IN BEHAVIORAL MANAGEMENT

In addition to the knowledge, skills and attitudes identified in the staff nurse job description, does the following:

1. Understands and can interpret to others the philosophy and objectives of the Special Care Unit.
2. Understands and can interpret to patients, staff, physicians, volunteers and family members the criteria for admission to or transfer from the Special Care Unit.
3. Understands and can instruct others in the process of obtaining baseline information about the frequency and antecedent and subsequent conditions under which a specific behavior takes place.
4. Understands the purpose of written behavioral management plans and is able to develop a written plan for:
   a) implementation of specific eating hygiene, dressing, toileting, activity routines;
   b) resocialization routines;
   c) routines related to the administration of medications (i.e. I.P.P.B., enemas).
5. Is able to identify the long range implications of short term nursing goals and thereby prevent unnecessary or avoidable institutional patterns of behavior.
6. Understands and can instruct others in the process of writing accurate behavior descriptions and critical incident reports.
7. Can conduct and give leadership at a conference for the purpose of:
   a) completing Patient Profile, and identifying critical behaviors and approaches;
   b) developing detailed behavioral management plan;
   c) identifying and solving problems in care of specific patients;
   d) consulting with doctor and other team members about major changes in the direction of care, re-assessment, discharge planning or interdisciplinary problems.
8. Understands and can apply the principles of reality orientation to the ward environment and care routines. Can instruct family members, volunteers and staff in these principles.

FIGURE B-4-B

JOB DESCRIPTION FOR THERAPY AIDE IN SPECIAL CARE UNIT

KNOWLEDGE: Preferably some post secondary education with course content in the areas of psychology (particuarly abnormal, and behavior modificatio) rehabilitation and recreation. Must have or acquire knowledge of basic skills required to assist clients with personal care in hospital environment.

PERSONAL CHARACTERISTICS AND ATTITUDES:

Demonstrated ability to work with a team in a structured setting, to accept professional supervision, to learn to respect the rights and needs of others (i.e. clients or staff), to participate in physical care of clients, and to respect privileged information.

SKILLS: UNDER THE DIRECTION AND SUPERVISION OF A REGISTERED NURSE

1 - assists clients with personal hygiene, eating, dressing and other activities of daily living as part of a total behavior management program;

2 - observes and supervises clients in the unit to ensure their safety and to be able to make a contribution to planning and evaluating therapeutic interventions;

3 - provides stimulation to individual clients or groups by structuring the environment or through planned activities, conversation, involvement of volunteers, visitors, etc;

4 - assists with planning and carrying out of group recreational activities such as reality orientation groups, excercise groups, outings, etc;

Job Description for Therapy Aides in Special Care Unit - Continued

---

5 - assists with specific aspects of record keeping and program evaluation within the unit;

6 - co-operates with other team members in carrying out plans for behavioral management of individual patients; and

7 - assists clients to enable them to participate in selected activities outside of the sheltered environment of the unit;

SKILLS: UNDER THE DIRECTION AND SUPERVISION OF THE SOCIAL WORKER

1 - acts as a resource person in designing and implementing behavioral management procedures;

2 - works under the direction of the social worker to take social histories, explore family and community resources, and to assist the client with personal and financial matters; and

3 - provides emotional support to clients and/or their families.

SKILLS: UNDER THE DIRECTION AND SUPERVISION OF THE OCCUPATIONAL THERAPIST

1 - implements activities of daily living designed to assist individuals with grooming skills, hygiene, eating, etc;

2 - implements directed activities designed to increase clients' concentration span, comprehension, memory and orientation; and

3 - implements group activities designed to improve awareness of self and others, co-operation, spontaneity and personal relationships.

APPENDIX B-5

ADMISSION AND DISCHARGE PROCEDURES IN SPECIAL CARE UNIT

Admission to the Hospital

All patients when first admitted to the Lethbridge Rehabilitation Hospital spent one to two weeks in an assessment unit (Smith, 1976) where registered nurses with specialized skills coordinate a detailed clinical and psychosocial assessment process. Before the patient was transferred from the assessment unit to another area of the hospital, the goalsand plan of care for each patient were reviewed and agreed upon at an interdisciplinary conference attended by the Chief of Medical Staff and representatives from all clinical departments. The functional status of the patient, the goals and treatment plan were summarized on the Interdisciplinary Patient Profile (Figure B-5). Dates for re-assessment were set to assure follow-up of the goals and any necessary modification of the plan.

Admission to the Special Care Unit

If a patient met the criteria for admission to the special care unit the Patient Profile for use in the unit (Figure B-5-A) was completed. The transferring nurse completed the top section of the Profile. Special care program goals were developed by nurses in the special care unit with the assistance of auxiliary staff (Figure B-5-B).

Transfer or Discharge From Special Care Unit

A formal mechanism for transfer or discharge of patients from the unit was developed. A flow chart indicating alternatives for admission, transfer or discharge of patients is presented in Figure B-5-C.

FIGURE B-5

INTERDISCIPLINARY PATIENT PROFILE

PERSONAL AND SOCIAL INFORMATION

NAME: _____ Hospital Number _____ Date of Birth _____

Previous Living Arrangements: _____

Source of Income or Financial Support: _____

Responsible Relative or Friend: _____

Address: _____ Telephone: _____

MEDICAL INFORMATION

Attending Physician: _____ Admitted from: _____

Medical Consultants: _____

Reason for Admission at this time: _____

Health Problems: _____

FUNCTIONAL ABILITY AND HEALTH CARE REQUIREMENTS

CODE: _____

Functional Ability

Level I - Independent

Level II - Needs partial or periodic assistance.

Level III - Needs complete or constant assistance.

Health Care Requirements

SC - Complete Self Care (includes treatment and medications)

S - Supportive Care (Nursing Home)

M - Motivational Care (Long-Term L.R.H.)

PH - Hospital Care: Physical condition unstable

BH - Special Care: Problematic behavior or emotional instability.

	Date									
1. Ambulation and Travel										
2. Transfers										
3. Hand Activities										
4. Continence										
5. Communication										
6. Emotional Needs										
7. Behavior										
8. Level of Care										

Reassessment Conferences: With Medical Staff in Attendance: (Nurse presenting to initial per names of physicians attending conference.) _____

EXPECTED OUTCOME OF TREATMENT AND HOSPITALIZATION:

Admission Date: _____ Expected Date of Discharge: _____

Treatment Goals (number each goal separately)

_____

_____

_____

Treatment Plan:

Nursing: _____

_____

_____

Recreation: _____

_____

Physiotherapy: _____

_____

Occupational Therapy: _____

_____

Social Services: _____

_____

Speech Therapy: _____

_____

Respiratory Therapy: _____

_____

Special Diet: _____

_____

Other Services: _____

_____

Treatment Outcome:

Date of Discharge: _____ Discharged To: _____

Condition of Discharge if different from last functional assessment: _____

_____

_____

Were Treatment Goals Achieved? (Refer to each goal above by number) _____

_____

_____

_____

Nurse completing discharge information: _____

FIGURE B-5-A

PATIENT PROFILE FOR SPECIAL CARE UNIT

Name: _____ Date of Birth: _____

Home or Permanent Residence: _____

_____

Next of Kin or Responsible Person: Name: _____ Telephone _____

Address: _____ Telephone _____

Other important Social Contacts: _____

_____

Attending Physician: _____

Other Doctors Who Have Visited or Consulted: _____

_____

Details of Admission to Lethbridge Rehabilitation Hospital:

Date: _____

E.D.D. _____

Reason for Admission: _____

Health Deficits Present: _____

_____

_____

General Goal of Care in Lethbridge Rehabilitation Hospital: _____

_____

_____

Reason for Admission to Special Care Unit: _____

_____

_____

SPECIAL CARE PROGRAM GOALS

To Increase the Following Behaviors:

1.

2.

To Decrease the Following Behaviors:

1.

2.

FIGURE B-5-B

ADMISSION PROCESS - SPECIAL CARE UNIT

STEP I

All admission or transfer of patients to the special care unit are to be reviewed with the Nursing Supervisor before they are initiated.

STEP II

If, after reviewing the patient's condition and the admission criteria, the Supervisor approves the admission the following should occur:

A. When a patient is admitted to the special care unit, whether from the Assessment Unit or some other area of the Rehabilitation Hospital, the nurse transferring the patient will complete the top section of the Patient Profile-Special Care Unit.

B. The items Reason for Admission, Health Deficits Present and General Goals of Care in the Lethbridge Rehabilitation Hospital should correspond identically with information on the Interdisciplinary Patient Profile.

C. The item "Reason for Admission to Special Care Unit" should include a specific description of the patient's behavior which makes it clear which of the admission critieria are being met. The number of the admission criteria being applied should be placed in brackets as in the following examples.

REASON FOR ADMISSION TO SPECIAL CARE UNIT:

Example 1

Teeth grinding and antisocial responses to all but a few staff members make it necessary to place this patient in a room with other antisocial patients. However, we believe he/she would benefit from increased stimulation and a more normal daily routine (Admission Criteria Numbers 6 - 7)

Example 2

Patient is disoriented and agitated - calls out frequently (Admission Criterion Number 1).

Example 3

Patient is unable to initiate interaction, but responds to others. Requires sheltered activity program (Admission Criterion Number 2).

Example 4

Patient has become dependent upon I.P.P.B. treatments at a specific time and is unwilling to accept a more flexible routine which would make out-patient treatment feasible (Admission Critieria Numbers 6 and 7.

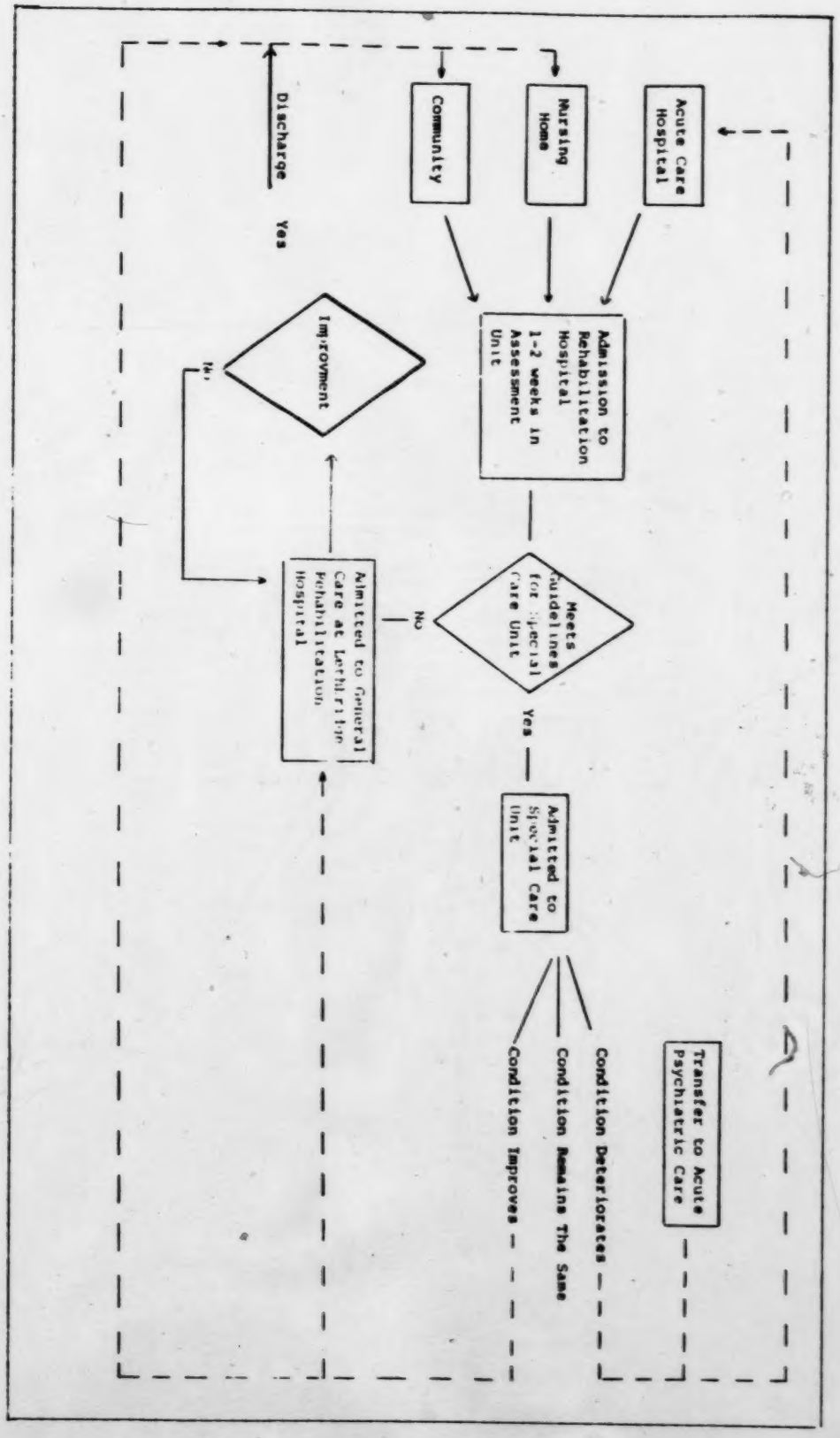
STEP III

The nurse in the Special Care Unit should:

- review nursing history and current care plan;
- personally observe and assess the patient's physical and behavioral status;
- tentatively identify two behaviors to be increased and two to be decreased;
- begin collecting baseline information about the frequency of these behaviors and the times and conditions under which they occur;
- review the behaviors tentatively selected and the baseline information with other special care unit staff at a preliminary care planning conference (should occur within one week of admission to the Special Care Unit); and
- using information obtained at the conference, finalize detailed behavioral management plans. These should be done no later than three weeks following admission of the patient to the Special Care Unit (see instructions for writing Behavioral Management Plans).

FIGURE B-5-C

PLACEMENT ALTERNATIVES FOR BEHAVIORALLY DISTURBED PATIENTS



A patient was transferred from the special care unit to another area of the Rehabilitation Hospital under the following conditions:

1) if the patient had become alert enough to receive more benefit from program elsewhere in the hospital;

2) if a behavioral assessment had been reason for admission and had been completed;

3) if a behavioral problem interfering with care or rehabilitation had improved;

4) if the patient's deteriorating or unstable condition became the predominating factor in their care;

5) if the patient's behavior had stabilized but she or he was still not suitable for discharge or transfer to Nursing Home because of physical conditions or care requirements; or

6) if the patient was awaiting discharge or transfer to Nursing Home.

APPENDIX B-6

DEVELOPING PLANS FOR BEHAVIORAL MANAGEMENT

The process for developing and using behavioral management plans is described in Chapter IV.

Once the behavioral management plan was finalized, it was discussed with the patient and his or her significant others. The responsible person was asked to sign an informed consent for the participation of the patient in the program. The consent form is presented as Figure B-6. Obtaining consent was considered necessary not only for legal purposes but because of the teaching opportunity it presented. The following materials used in developing and implementing the behavioral management plans are presented.

1) Assessment of Critical Patient Behavior
2) Behavioral Management Plan and Progress Notes
3) Instructions for Writing Behavioral Management Plans
4) Mental Status Questionnaire

FIGURE B-6

CONSENT FOR PARTICIPATION IN BEHAVIORAL MANAGEMENT PROGRAM

I understand that a behavioral management program at the Lethbridge Rehabilitation Hospital is being undertaken to co-ordinate the efforts of staff, patients and their families in encouraging behavior that will help the patient achieve identified rehabilitation goals and discouraging behavior that is likely to interfere with the achievement of these goals.

The behavioral management plan for . . . . . has been explained to me and I authorize members of the staff of the Rehabilitation Hospital to implement the plan.

I further give permission for the staff of the Rehabilitation Hospital to communicate the content of the plan to other agencies or professionals who may be involved in the treatment program.

_____ DATE: _____

SIGNATURE OF PATIENT OR RESPONSIBLE PARTY

_____ DATE: _____

SIGNATURE OF NURSE/WITNESS

FIGURE B-6-A

FORM FOR ASSESSMENT OF CRITICAL PATIENT BEHAVIOR

NAME: _____ AGE: _____ ADMISSION DATE: _____

MEDICAL CONDITION: _____

Critical Behavior	Date	Exact Time	Events Leading Up To Behavior	Description of Behavior	Events Following Behavior	Staff Member Observing

FIGURE B-6-B

INSTRUCTIONS FOR WRITING BEHAVIORAL MANAGEMENT PLANS AND PROGRESS NOTES

The purpose of a Behavioral Management Plan is to provide staff with specific instructions which will enable them to:

1. use interaction and other types of reinforcement to achieve the goals of care; and
2. help to retrain or re-orient the patient to socially acceptable and reality oriented behavior through consistent instructions, patterns of care and consequences.

The Behavioral Management Plan consists of Four Parts:

1. The Behavioral Goal
2. Description of Target Behaviors to be increased or decreased
3. Staff Actions or Environmental Consequences: Directions for staff responses to the patient's behavior
4. Progress Notes - a record of the patient's progress toward the target behaviors and goals.

I. The Behavioral Goal is a general statement of what you hope the patient will achieve, such as

> "Will learn to accept feeding, toileting or morning care from any member of the staff"
>
> or
>
> "Will learn to eat sitting up so he can participate in outings with recreation department"
>
> or
>
> "Will regain a sense of privacy and request nurse to draw curtains around her bed before she uses bedpan".

The four target behaviors you choose could all relate to the same general goal or they could relate to more than one goal. The target behaviors can be seen as small steps that help the patient reach the goal. For example: Going on outings with the recreation department would have to be preceeded by eating and drinking in an upright position, remaining dressed and continent for up to two hours, etc.

In selecting the goal, keep in mind the reasons for the patient's admission to the Special Care Unit. The best goals are those which would stablize or improve these behaviors, allowing the patient to be cared for in an area with less intensive staffing.

II. Select, with the help of other staff in conference, two target behaviors to be increased and two to be decreased. If you have trouble thinking of four, two will do. It is especially important to identify behaviors to encourage or increase - these

FIGURE B-6-B (Continued)

INSTRUCTIONS FOR WRITING BEHAVIORAL MANAGEMENT PLANS AND PROGRESS NOTES

Continued

constitute the most important basis for the behavioral management program. If you can, write the behaviors to be decreased in positive terms and work with four behaviors to be increased. These behaviors should be written under the "Goals" column on the Patient Profile Sheet. You should then use 1 yellow Behavioral Management Plan for each of the target behaviors. You could, therefore, have as many as four sheets.

III. In the column "Behavior to be Encouraged or Discouraged" write a description of the behaviors you wish to see. The more specific you can be here, the better. Answer the questions:

1) What will the patient be able to do?

2) When or How Often or under what conditions will he/she do it?

In plans of this type, it is best to work with two small, highly specific behaviors, since you are more likely to be able to evaluate whether the patient has achieved the goal or made progress toward it. For example:

"Will voluntarily come out of room after being invited once, and join others in the solarium for refreshments 4 mornings out of 5"

is preferable to

"Increased social interaction and participation"

In the column "Staff Actions or Environmental Consequences", you will write specific instructions for staff behavior in relation to the patient. In deciding what these instructions should include, consider

a) What factors (interpersonal, environmental) currently encourage or maintain the problem behavior. For example, when the patient complains of headache, does he always get a pill and/or some staff attention? Does he get more attention for having a headache or not having one?

b) which technique or response or a combination of several might produce the desired behavior. Things to consider here are - what does the patient like or respond to that you can use as a reinforcer. Remember, a reinforcer must be -

EFFECTIVE - i.e. if it is given the behavior increases, or if withheld, the behavior decreases.

CONTROLLED - must be within the power of the staff to deliver the reinforcer.

RAPID - reinforcers are most effective when they immediately follow the behavior they are suppose to influence.

FIGURE B-6-B (Continued)

INSTRUCTIONS FOR WRITING BEHAVIORAL MANAGEMENT PLANS AND PROGRESS NOTES

Continued

In writing directions for staff, it is again important to be as specific as possible. For example:

"Give praise and attention" is less specific than

"Whenever Mr. X makes a request or initiates conversation, look directly at him, give your full attention for a few minutes, respond, using his name and giving praise - eg. " Oh Mr. X, I'm glad you asked me to help you."

or

Rather than "assist with eating" you might wish to specify a routine to be followed during the meal which would help to re-socialize and re-establish habits. For example:

1) Set Mr. X. at the table not facing a window (He sees better when not facing bright light).

2) Place cutlery on right side of tray where he can reach it with his good hand.

3) Place napkin in his lap and remind him it is there.

4) Name each food as you give it to him and ask him to tell you how it tastes.

5) Alternate solid food and fluids, etc.

1. There is a yellow sheet for each behavior you are working on. Make sure you have the right sheet for your observation.

2. Progress notes go on the back of the sheet.

3. Note should contain:
   - Date
   - Time and Place
   - Who else was present? (patients, staff, visitors)

* MOST IMPORTANT: What did the patient DO OR SAY that you thought was significant?

REMEMBER: Your notes will become part of the chart. They tell about you as well as the patient. Do them neatly, in ink, be specific and FACTUAL.

- Your signature
- Your job category, Nursing Attendant, CHA, CNO, Therapy Aide
- RN, O.T. Rec. Therapist, etc.

ALL STAFF MEMBERS FROM ALL DEPARTMENTS WORKING WITH THE PATIENT ON THE UNIT SHOULD FAMILIARIZE THEMSELVES WITH THE PATIENT PROFILE, AND BEHAVIORAL MANAGEMENT PLANS FOR ALL PATIENTS SO THAT THEY CAN MAKE AND CONTRIBUTE MEANINGFUL OBSERVATIONS TO THE PROGRESS RECORD.

FIGURE B-6-C

BEHAVIORAL MANAGEMENT PLAN FOR SPECIAL CARE UNIT

NAME: _____ AGE: _____ ADMISSON DATE: _____

MEDICAL CONDITION: _____

BEHAVIORAL GOAL: _____

Behavior To Be Encouraged	Staff Actions - Environmental Consequences	Behavior To Be Ignored or Discouraged	Staff Actions - Environmental Consequences

FIGURE B-6-D

MENTAL STATUS QUESTIONNAIRE

These questions will help to ascertain whether or not organic brain syndrome is present. It is important to work these questions into your conversational approach to the patient and try not to embarrass the person. Answers obtained under pressure are complicated by fear and anger. Deafness, language problems and hostility can also cause higher scores.

SUGGESTED APPROACH - I'd like to test your memory today. I hope you don't mind these very simple questions. Would you remind me of how old you are and what year you were born?

Date							
1) What is your age?							
2) What is the year of your birth?							
3) What is the day today?							
4) What month is it?							
5) What year is it?							
6) Where are we located?							
7) What is this place?							
8) What is my name or what is the name of someone with the patient whom he should recognize and know?							
9) What is the name of the current Prime Minister?							
10) Who was Prime Minister before him?							
Total Score							

HOW TO SCORE:
- 0 - 2 wrong answers - patient may have no to minimal brain syndrome.
- 3 - 5 wrong answers - patient has at least mild and possibly moderate brain syndrome
- 6 - 8 wrong answers - at least moderate brain symdrome
- 9 - 10 wrong answers - severe organic brain syndrome.

FROM: "Managing the Disturbed Elderly Patient in Family Practice" an Interview with Dr. Alvin I. Goldfarb.

APPENDIX B-7

ACTIVITIES OF DAILY LIVING IN THE SPECIAL CARE PROGRAM

Prior to introduction of the special care program, most of the behaviorally disturbed patients had trays brought to them in their rooms. Although it was generally the practice for patients in the hospital to be dressed in their own clothes, some of the disturbed patients had worn hospital clothing because of their incontinence. A number of the patients had spent their days in geriatric chairs or wheelchairs, except for trips to the toilet or rest period when they returned to bed. Most had beem content to be put to bed around 6 p.m. immediately after the evening meal. Few of the disturbed patients had been able to participate in recreational events outside the hospital, although some were included in large internal events like the Christmas party. A few of the patients had been selected for participation in reality orientation and re-motivation groups.

In the special care program, patients had breakfast in their rooms as they had formerly done. The three young or middle-aged adults who were mentally handicapped were supervised in getting ready to catch the bus for the Rehabilitation Workshop downtown. They returned in the mid afternoon.

All patients were assisted to choose and dress in their own clothes and to be ready for 'morning coffee' in the solarium at 9:30 a.m. Following coffee, some patients remained in the solarium and others had individual sessions with the occupational therapy aide. Regular toileting schedules were observed.

Most patients ate lunch in the solarium with the exception of a few patients who became very agitated in a stimulating environment and those with whom the occupational therapy aide might be doing individual training. Nursing personnel assisted patients to eat and encouraged their awareness of and interaction with others. Following a rest period, most patients returned to the solarium where afternoon refreshments were served and where the group activities took place.

The three patients who attended the downtown workshop ate dinner in the large downstairs dining room. If their behavior became antisocial, their trays were taken to the solarium in the special care unit. Dinner for patients in the special care unit was served in the solarium. Patients were encouraged to remain up until eight o'clock or later. The therapy aide who worked from noon until 9:00 p.m. supervised patients in the solarium and organized their evening activities.

There was some resistance to the evening program from both staff and patients who had become habituated to the former routine. However, both individual and group activities were planned and eventually the new pattern became established. Since several visitors came in the evening, support and instruction could be given at this time.

The three patients who worked downtown were encouraged to have as normal a routine as possible. As long as their behavior was not offensive to others, they were included in recreation activities for patients elsewhere in the hospital. These activities sometimes involved out of hospital trips to a movie, lounge, sports event or concert; other times there were games or sing songs in the hospital. The evening therapy aide also spent individual time with these patients, endeavoring to help them

increase their range of conversational topics and their social skills.

One type of individual care deserves special mention. This came to be called "walking therapy". Patients who were not independently ambulant and who spent their time either in bed or in a wheelchair or geriatric chair were taken for a walk, the length of the hallway and back. Two and sometimes three staff members were required for this activity, since most of these patients were unable to stand alone. The walk thus involved a considerable amount of excitement. The purpose of the walking was explained to staff, patients and families. By putting a number of muscles and muscle groups into action, the walking helped to increase circulation, maintain muscle tone, and prevent constipation. It represented a relatively vigorous physical activity for the patient and thus produced reduction of muscle tension, making aggressive outbursts less likely. It produced muscle relaxation and could thus be expected to enhance sleep. It was perceived by both patients and staff as a purposeful activity, and the physical contact and upright position assisted in maintaining an accurate body image. It provided the patient the opportunity to view his environment from a different and more dignified perspective.

Finally, seeing the patient in the upright position and accomplishing something <u>with</u> him generated goodwill between patients and staff members. The walks frequently ended with staff and patient congratulating each other and laughing.

APPENDIX B-8

GROUP TREATMENT METHODS

Although a varied social and recreational program was available in the hospital, it was geared to patients who were mentally sound and not antisocial. Behaviorally disturbed patients were frequently disruptive in such activities and required a level of personal supervision that made it impractical to include them. When the special care unit was established, three types of recreational programs, (sheltered, supervised and unlimited) were defined. Each patient in the hospital was assessed to determine which type of program was appropriate. Sheltered activities had not previously existed. When the special care unit opened, both in and out-of-hospital sheltered programs were planned for the patients.

Regular activities like the morning coffee and the therapeutic activities program were scheduled for the solarium. Disturbed patients were included in other hospital activities when supervision was available.

The morning coffee program has already been described. The therapeutic activities program was conducted in the solarium by the occupational therapy aide three afternoons a week. A variety of activities were introduced, including simple crafts, games, singing, rhythm band. and potting plants.

Visitors were included in the activity sessions but were sometimes problematic in that they tried to take over and do the activity for the patient or because they were ashamed and critical of the patient's efforts.

The reality orientation and remotivation groups have already been mentioned. A screening tool and progress record was used to determine

group membership (Figure B-8). These groups were conducted by recreation therapy aides.

A few patients from the special care unit also participated in a weekly conversation group conducted by two volunteers. This was an informal discussion of current and community events at which refreshments were served. Members were selected by the volunteers.

Volunteers were an important resource when special care unit patients were included in outings such as picnics, the rodeo, or shopping trips downtown, since one-to-one supervision of disturbed patients was necessary. Outings designed exclusively for special care unit patients included a fishing trip and special meals prepared by volunteers.

FIGURE B-8

PATIENT SCREENING AND PROGRESS FORM FOR GROUPS

Instructions: Date column and check the characteristics that apply to the Patient on the date noted:

	Date		
Sitting tolerance ½ - 1 hour			
Continent or controlled incontinence for ½ - 1 hour			
Note other physical problems, e.g. drooling choking spasm, apasia			
TEST OF MEMORY AND ORIENTATION			
1. What is your name?			
2. What is your address?			
3. When were your born - your birth day			
4. How old are you?			
5. What is the name of this place?			
6. What day of the week is it?			
7. What date is it today?			
8. What month are we in?			
9. What year are we in?			
SET TEST			
Ask person to list all he/she can think of. colours			
animals			
fruits			
towns			
Give 1 point for each listed - stop at 10			
IMMEDIATE MEMORY			
Repeat these 3 numbers reverse, 5,8,3.			
Repeat 4 numbers reverse, 10,2,6,9.			
BEHAVIOR			
1. identifies staff.			
2. identifies other patients			
3. follows simple instructions			
4. Socially inappropriate comments, behavior, or mood			
5. Appropriate non-verbal responses			
6. Delusional or hallucinating			
7. Disruptive			
8. Aggressive or actively unco-operative			
9. Passive or withdrawn			
10. Willing to participate			
11. Obvious muscle tension, fidgeting and picking			

APPENDIX B-9

SUPPORT FOR SIGNIFICANT OTHERS

It was recognized that family members and friends were an important source of meaning and motivation for special care unit patients and that they could provide valuable links to reality and to the past. They were also an important source of information for staff. Most of the patients had regular visits from significant others. Since the patients themselves were often unable or unlikely to provide reinforcement for their visitors, providing support to significant others was identified as a responsibility of the staff.

All staff were encouraged to interact with patients' visitors. Instructions of visitors was done primarily by the registered nurse or the therapy aide. At the time of admission to the unit, the nurse explained that because of the special needs of the patient, he or she had been placed in the area of the hospital where there were more staff and where the staff were specially trained. Most relatives reacted positively to this and were aware of the behavioral problem which had led to the transfer. Most relatives had concern that their loved one not trouble "sick" patients.

When the informed consent for implementation of the behavioral management plan was obtained, the nurse began a process of instruction for relatives. They were taught to respond to the target behaviors as directed in the plan. They were also taught principles of reality orientation where these were applicable to the patient. Several of the relatives found it difficult to apply these principles, having for some time considered disorientation inevitable and irreversible and having considered it a kindness to "go along" with what the patient

said, even when it was incorrect. In one case, a relative was discovered to be deliberately contributing to disorientation, confusion and suspicion on the part of the patient. In this case, a staff member was assigned to be present to supervise the visit and support the patient. Visitors were encouraged to do things with the patients and to bring small gifts that stimulated the senses or which would recall pleasant times. Most visitors were grateful for guidance and relieved to discover that there were concrete things that they could to to help their loved one. Visitors were encouraged to eat with the patients and to accompany them to social and recreational events.

Several group meetings were organized for the visitors of patients in the special care unit. The Director of Nursing and staff from the unit were present. Information about the purpose of the unit was given and participants were encouraged to ask questions or share feelings. They did so freely. Frequently, questions had to do with the possibility of transfer of their loved one to a nursing home - a prospect which filled most with dread. Other questions had to do with hospital routines and procedures. Many visitors expressed surprise at the flexibility and warmth of the hospital environment. Relatives expressed feelings of guilt and inadequacy. Some relatives felt guilty about having put their loved one in an institution and ashamed of their loved ones' antisocial behavior. They felt inadequate at not being able to do more. Many expressed appreciation for the work of the staff and for the opportunity to meet together.

Attendance at the group meetings numbered from 15 to 20; in some cases more than one member of a family was present. A good turn

out on the first good gardening evening of spring was considered significant by staff. Those attending the meetings seemed glad to meet each other and to share experiences.

There was a initial staff concern that relatives of the mentally handicapped younger adults might resent the placement of these patients with the behaviorally disturbed elderly. However, in all cases, these relatives recognized the disturbed behaviors presented by their loved one and were grateful for the efforts of staff in trying to work constructively with the problem behaviors. In some cases, these relatives tended to reinforce the sick role and dependency in the patient. A major challenge in care was to help them see the necessity for acceptance of responsibility, consequences and choice by the patient. These relatives attended some of the evening meetings and contributed to the discussion.

APPENDIX B-10
MEDICAL SUPPORT

At the time this project was carried out, no Lethbridge hospital had a Medical Director. The quality of medical care was thus delegated to committees of the medical staff organization.

The Rehabilitation and Extended Care Committee is a sub-committee of the medical staff at Lethbridge Municipal Hospital. Its six members are responsible for setting and enforcing medical policy at the Rehabilitation Hospital and for assessment and reassessment of patients. The latter functions are delegated to the Central Placement Officer and the Interdisciplinary Patient Review Committee.

The Rehabilitation and Extended Care Committee supported the establishment of the special care unit although there was some initial concern that the hospital would turn into a psychogeriatric facility by default and begin to receive even more disturbed patients than already was the case.

Recognizing that medical diagnosis and treatment of the confused elderly person frequently left something to be desired, the committee approved a Protocol for Diagnosis of Confused or Disoriented Patients (Figure B-10). The protocol gave support to nursing personnel in their efforts to obtain necessary diagnostic information which could only be ordered by physicians.

Prototype dosages and schedules for sedation or mood altering medication were also made available to nurses so that they could obtain effective orders from physicians who were inexperienced in dealing with the elderly.

FIGURE B-10

PROTOCOL FOR DIAGNOSIS OF CONFUSED OR DISORIENTED PATIENTS

OBJECTIVE: The purpose of this policy is to identify correctable physical conditions which can manifest themselves as confusion or disorientation, especially in elderly patients.

RECOGNIZED COMMON CAUSES OF CONFUSION

1. Adverse reactions or complications related to drug therapy particularly diuretics, antihypertensives, sedatives and hypnotics, tranquillizers and antidepressants; may also be caused by other commonly used drugs such as digitalis or antibiotics or by alcohol withdrawal.
2. Infection - usually chest or urinary tract
3. Cerebral Vascular Disease - transient ischemic attack or cerebral vascular accident.
4. Cardiovascular Disease - arrythmias myocardial infarctions (silent) or insidious congestive heart failure.
5. Anemia or nutritional deficiency
6. Metabolic and Endocrine - diabetes, hyoglycemia, electrolyte imbalance.
7. Constipation and fecal Impaction and/or secondary urinary incontinence.
8. Acute Surgical Conditions - appendicitis, cholecystitis, bowel obstruction (may present silently in the elderly with confusion as the only symptom).

ESSENTIAL DIAGNOSTIC PROCEDURES:

1. Physical Examination
2. Review of all medications utilizing input from pharmacist and nursing observations
3. Diagnosis of toxic confusional states:

   C.B.C.
   E.S.R.
   Urinalysis, Culture and Sensitivity
   Electrolytes, Blood Sugar, B.U.N.
   Chest X-Ray
   E.C.G.

ADDITIONAL PROCEDURES IF CONFUSION PERSISTS:

T_3 and T_4
Vitamin B_{12} and Folic Acid Levels
Serum Ca and P
Brain Scan

IMPLEMENTATION

If confusion is present or develops and the above investigations have not recently been carried out, the nurse will contact the attending physician and request his co-operation in carrying out the essential procedures listed above.
In the event that an order to the contrary is received, the Chief of Staff will confer with the attending physician or his deputy.

Following this, or if the attending physician or his deputy are unavailable, the Chief of Staff may authorize any or all of the diagnostic procedures in the interests of ensuring diagnosis and appropriate medical treatment.

APPENDIX B-11

STAFF PREPARATION AND SUPPORT

It has been noted by Smith (1977) and Goffman (1963) that workers caring for stigmatized persons are themselves stigmatized. It follows that enhancing the dignity and self-esteem of care givers is essential if care of a stigmatized group is to be improved. The provision of tangible recognition and incentives for doing difficult work well is also important. These factors were considered in planning for the special care unit.

Certain negative factors were assumed to be associated with working in the special care unit. Staff could expect to receive little reinforcement from improvement in patients' physical condition, since patients, on the whole, were quite frail. It has already been pointed out that these disturbed patients had been placed in the Rehabilitation Hospital as the alternative of last resort. Their behavioral or physical condition was not expected to improve. For this reason these patients received relatively few physician visits and staff working in the unit had only infrequent contact with physicians. Contact with physicians has traditionally been perceived as reinforcing to nursing personnel.

Staff were in some danger of physical injury and verbal abuse by patients in the special care unit. Patients required intensive supervision so freedom to leave the patient care environment was limited. Three categories of personnel had the greatest responsibility for and contact with the special care patients. These were registered nurses, nursing assistants and attendants, and therapy aides.

Additional demands were made of registered nurses in the special care unit. A high level of assertiveness and responsibility for initiating contact with doctors to obtain necessary medical orders was necessary. The nursing role was defined to include direct patient care and working with aides at the bedside. Direct patient care by the registered nurses was considered necessary so that the required assessment, observation and teaching could take place, but it had not been common in the hospital. Nursing aides and nursing assistants had been accustomed to performing direct care for the disturbed patients but would be asked to learn new observation and communication skills and to assume some record keeping functions in the special care unit. Aides were asked to try different approaches; indeed in some cases, to reverse their way of dealing with the disturbed patients. The therapy aides had to adjust to the hospital environment, learn personal care skills, and gain the acceptance of the staff. They had responsibilities for developing draft behavioral management plans for discussion and for keeping records but also had to perform a considerable amount of repetitive work.

It was considered important to bring the staff of the special care unit together to develop communication skills and a team identity. A one day workshop for this purpose was held in the lounge of the nurses' residence. Staff members were paid to attend the workshop; they came in street clothes and ate lunch together. The privilege of attending staff development activities had most frequently, in the past, been extended to professional staff.

The workshop presented by the Director of Nursing included:

1. an introduction to the behavioral model emphasising effects of reinforcement and types and characteristics of reinforcement;

2. discussion and practice in observing and describing behavior in concrete terms;

3. review of philosophy and objectives of the special care unit;

4. review of roles and functions of personnel for the special care unit;

5. review of admission criteria, forms and procedures developed for the special care unit;

6. review of program elements;

7. review of implementation schedule (Figure B-11); and

8. open discussion of the exploratory nature of the program; the inability to predict or guarantee improvement in patients' condition as a result of the program and opportunities presented by the program.

Anonymous written evaluations solicited from participants were uniformly positive, suggesting that the workshop itself had produced some Hawthorne effect. Every effort was made to capitalize on this effect and to maintain a high morale among staff. Although the registered nurse was clearly expected to give leadership, status differences between categories of staff were intentionally minimized to create a positive working climate.

The special care unit was identified as a unique program within the hospital. An attempt was made to reverse former perceptions that the behaviorally disturbed patients were the least interesting and rewarding to care for. The patients in the special care unit were described by the Director of Nursing as having complex medical and psychosocial needs and therefore requiring care by staff with special skills. Staff were invited to volunteer to work in the unit; however, those considered to have the necessary abilities were approached and asked for their contribution. The invitation was positively perceived and with two or three exceptions,

staff approached in this fashion agreed to work in the unit.

The need to rotate staff out of the special care unit periodically was recognized. After setting up the unit with an interested group of staff, personnel from elsewhere in the hospital were rotated through the unit to develop their skills while some of the initial unit staff rotated out to other areas. Although the initial group of staff were pleased to work in the unit, as the program developed they appreciated the opportunity to rotate out of the unit, usually after a six weeks to two month assignment. The advantages of providing staff with this opportunity to rotate were offset by having a lesser degree of continuity of care within the unit than would have been ideal. It contributed to difficulty in keeping detailed written records. Overall consistency and continuity in the unit was maintained, however, by having one nurse who was particularly interested and able be responsible for the unit for almost the entire first year of its operation.

On the whole, the nurse responsible for the special care unit worked a day shift. She was willing to make herself available for special activities and particularly for the evening meetings with significant others. Aides who worked in the unit received more than the usual amount of reinforcement from registered nurses who worked directly with them in patient care. Nursing Aides and attendants were encouraged to attend and contribute their opinions at all patient conferences. The therapy aides in the program had university education in the social sciences and perceived their positions as an opportunity to gain experience which would help them obtain future employment. Contact with professional members of the interdisciplinary team was important to them because of the learning opportunities

which were presented.

Team conferences were an important focus in both directing care and maintaining staff commitment and morale. The Director of Nursing attended patient conferences on the unit to provide guidance in the selection of goals and target behaviors and to praise and encourage the efforts of staff. The conferences were defined as an informal time and staff were encouraged to share their frustrations and humorous observations as well as information related to the care plan. Not unexpectedly, some staff liked some patients better than others and felt they could work better with them. Patients also had likes and dislikes. A general principle was established, namely that all staff were to maintain a knowledge of all patients in the unit and therefore had to take a turn at working with each one periodically. However, positive feeling between staff and patient was considered desirable so every effort was made to accommodate preferences in the work assignment. There were no patients disliked by everyone and some patients who were the most difficult to care for were chosen by some staff as favorites. It was simply recognized that one occasionally "needed a rest" from certain patients.

Systematic plans were made for dealing with unusual events such as elopements or aggressive outbursts by patients. Methods of approaching violent patients to restrain and sedate them when necessary were preplanned. Methods by which staff could call each other for help in emergencies were identified. The care and protection of patients who had expressed suicidal intentions was also discussed. These discussions provided a kind of permission for staff to examine their fears and anxieties objectively and to separate patient behavior which might "look bad" or be upsetting

from that which presented a definite danger. The conference situation provided an opportunity for values clarification and to publicly reinforce staff members for good work. Educational and supportive dimensions remained important, even after the unit became well established.

FIGURE B-11

SCHEDULE OF ACTIVITIES IN PROGRAM IMPLEMENTATION

ACTIVITIES	TARGET DATE OR FREQUENCY	FOLLOW-UP
1. Program Design		
2. Staff Recruitment and Selection		
3. Development of Terms of Reference Materials		
4. Initial Patient Selection with Involvement of External Expert		
5. Initial Staff Orientation		
6. Gradual Relocation of Patients to Unit		
7. Commencement of Essential Care Routines		
8. Completion of Patient Profiles		
9. Initial Assessment of Critical Behaviors		
10. Environmental Identifications		
11. Finalization of Medical Policies		
12. Orientation of Medical Staff		
13. Obtaining Medical Orders and Input Via Conferences		
14. Drafting Behavioral Management Plans		
15. Orientation of Patients and Families to Rehab Goals		
16. Obtaining Consent		
17. Finalizing of Behavioral Management Plans		
18. Commencement of Rehab Care Routines		
19. Record Keeping and Individual Patient Program Evaluation		
20. Admission and Conferencing Transfer of Patients		
21. Staff Meetings and Educational Sessions		
22. Rotation of Staff in and out of Unit		
23. Ongoing Program Evaluation and Modification		
24. Formal Program Evaluation		